

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 10—Air Conservation Commission
Chapter 5—Air Quality Standards and Air Pollution
Control Rules Specific to the St. Louis Metropolitan
Area

PROPOSED AMENDMENT

10 CSR 10-5.455 Control of Emissions from Industrial Solvent [Cleanup] Cleaning Operations. The commission proposes to amend the rule title, rule purpose, and section (3) and renumber and amend sections (1), (2), (4), and (5) of the rule. If the commission adopts this rule action, it will be the department's intention to submit this rule amendment to the U.S. Environmental Protection Agency to replace the current rule that is in the Missouri State Implementation Plan. The evidence supporting the need for this proposed rulemaking is available for viewing at the Missouri Department of Natural Resources' Air Pollution Control Program at the address listed in the Notice of Public Hearing at the end of this rule. More information concerning this rulemaking can be found at the Missouri Department of Natural Resources' Environmental Regulatory Agenda website, www.dnr.mo.gov/reg/index.html.

PURPOSE: This rule will reduce the volatile organic compounds (VOC) emissions from industrial cleaning operations that use organic solvents. This amendment will lower the allowable emissions threshold for VOCs released per day from the use, storage, and disposal of industrial cleaning solvents. It will also add requirements for facilities that have VOC emission levels that exceed the threshold, including placing limitations on the VOC content of the cleaning materials. The evidence supporting the need for this proposed rulemaking, per section 536.016, RSMo, is the publication by the U.S. Environmental Protection Agency 2006 Control Techniques Guidelines for industrial cleaning operations and Clean Air Act section 182(b)(2).

PURPOSE: This rule will reduce [solvent emissions from solvent cleanup operations] the volatile organic compounds emissions from industrial cleaning operations that use organic solvents.

[(1) Definitions of certain terms specified in this rule may be found in 10 CSR 10-6.020.]

[(2)](1) Applicability.

(A) This rule shall apply throughout St. Louis City and the Counties of Jefferson, St. Charles, Franklin, and St. Louis.

(B) This rule shall apply to any person who performs or allows the performance of any cleaning operation involving the use of *[a volatile] organic [compound (VOC)]* solvents or solvent solutions. **Except as provided in subsections (1)(C) through (1)(E) of this rule, the *[The]* provisions of this rule shall *[not]* apply to any stationary source *[at which cleaning solvent VOCs are emitted at less than five hundred (500) pounds per day.]* that emits at least three (3) tons per twelve (12)-month rolling period or more of volatile organic compounds (VOCs) from cleaning operations at the source, in the absence of air pollution control equipment, and stores and/or disposes of these solvent materials.**

(C) The following solvent cleaning operations are not subject to the provisions of this rule:

1. Cold cleaner;
2. Open top vapor degreaser;
3. Conveyorized cold cleaner;
4. Conveyorized vapor degreaser;
5. Stripping of cured coatings, cured ink, or cured adhesives;
6. Cleaning operation in printing pre-press or graphic arts pre-press area, including the cleaning of film processors, color scanners, plate processors, film cleaning, and plate cleaning;

[5.]7. Nonmanufacturing area cleaning. Nonmanufacturing areas include cafeterias, laboratories, pilot facilities, restrooms, janitorial cleaning, including graffiti removal, and office buildings; and

[6. Cleaning operations for which there has been made a best available control technology (BACT), reasonably available control technology (RACT), or lowest achievable emission rate (LAER) determination; and]

*[7.]8. Cleaning operations *[which are subject to the Aerospace National Emission Standards for Hazardous Air Pollutants Standards (NESHAP) source category.]* for emission units within the following source categories listed for regulation under section 183(e) of the Clean Air Act:*

- A. Aerospace coatings;
- B. Auto and light duty truck assembly coatings;
- C. Fiberglass boat manufacturing materials;
- D. Flat wood paneling coatings;
- E. Flexible packaging printing materials;
- F. Large appliance coatings;
- G. Letterpress printing materials;
- H. Lithographic printing materials;
- I. Metal furniture coatings;
- J. Miscellaneous industrial adhesives;
- K. Miscellaneous metals parts coatings;
- L. Paper, film, and foil coatings;
- M. Plastic parts coatings;
- N. Shipbuilding and repair coatings; and
- O. Wood furniture coatings.

(D) The following solvent cleaning operations are exempt from the VOC-content limitations specified in subsection (3)(A) of this rule:

1. Cleaning of solar cells, laser hardware, scientific instruments, and high-precision optics;
2. Cleaning conducted as part of the following: performance laboratory tests on coatings, adhesives, or inks; research and development programs; and laboratory tests in quality assurance laboratories;
3. Cleaning of paper-based gaskets and clutch assemblies where rubber is bonded to metal by means of an adhesive;
4. Cleaning of cotton swabs to remove cottonseed oil before cleaning of high-precision optics;
5. Cleaning at medical device and pharmaceutical facilities using up to one and one-half (1.5) gallons per day of solvents;
6. Cleaning of adhesive application equipment used for thin metal laminating;
7. Cleaning of electronic or electrical cables;
8. Touch-up cleaning performed on printed circuit boards where surface mounted devices have already been attached;
9. Cleaning of coating and adhesive application processes utilized to manufacture transdermal drug delivery product using less than three (3) gallons per day of ethyl acetate;
10. Cleaning of application equipment used to apply coating on satellites and radiation effect coatings;
11. Cleaning of application equipment used to apply solvent-borne fluoropolymer coatings;
12. Cleaning of ultraviolet or electron beam adhesive application;
13. Cleaning of sterilization indicating ink application equipment if the facility uses less than one and one-half (1.5) gallons per day of solvents for such cleaning;
14. Cleaning of metering rollers, dampening rollers, and printing plates;
15. Cleaning of numismatic dies; and
16. Cleaning of operations associated with digital printing.

(E) Cleaning with aerosol products shall be exempt from the requirements of subsection (3)(A) of this rule if the facility uses one and one-quarter (1.25) gallons (one hundred sixty (160) fluid ounces) or less of the aerosol products per day.

(2) Definitions. Definitions of certain terms specified in this rule may be found in 10 CSR 10-6.020.

(3) General Provisions. *[Any person performing any industrial cleaning operation, not excluded in subsection (2)(B) or (C), involving the use of a VOC solvent or solvent solution shall demonstrate a thirty percent (30%) reduction in plant-wide industrial VOC cleaning solvent emissions as described in section (4) of this rule by May 31, 1996.]*

(A) VOC-Content Limitations. No owner or operator of a source subject to this rule shall perform any cleaning operation subject to this rule unless the owner or operator meets the requirements in paragraph (3)(A)1., (3)(A)2., or (3)(A)3. of this rule—

1. The VOC content of the as-used cleaning solutions (minus water and exempt compounds) shall not exceed the following emissions limitations:

A. Product cleaning during manufacturing process or surface preparation for coating, adhesive, or ink application.

Solvent Cleaning Operation	VOC Emission Limit	
	Kilograms per liter	Pounds per gallon
Electrical apparatus components and electronic components	0.10	0.83
Medical devices and pharmaceuticals	0.80	6.70

B. Repair and maintenance cleaning.

Solvent Cleaning Operation	VOC Emission Limit	
	Kilograms per liter	Pounds per gallon
Electrical apparatus components and electronic components	0.10	0.83
Medical devices and pharmaceuticals: tools, equipment, and machinery	0.80	6.70
Medical devices and pharmaceuticals: general work surfaces	0.60	5.00

C. Cleaning of ink application equipment.

Solvent Cleaning Operation	VOC Emission Limit	
	Kilograms per liter	Pounds per gallon
Rotogravure printing that does not print flexible packaging	0.10	0.83
Screen printing	0.50	4.20
Ultraviolet ink and electro beam ink application equipment, except screen printing	0.65	5.40
Flexographic printing that does not print flexible packaging	0.10	0.83

D. All other solvent cleaning operations.

Solvent Cleaning Operation	VOC Emission Limit	
	Kilograms per liter	Pounds per gallon
All other solvent cleaning operations not subject to specific limitations in paragraphs (3)(A)1., (3)(A)2., or (3)(A)3. of this rule	0.05	0.42

2. The composite vapor pressure of each as-used cleaning solution used does not exceed eight millimeters of Mercury (8.0 mmHg) measured at twenty degrees Celcius (20 °C) (sixty-eight degrees Fahrenheit (68 °F)); or

3. An oxidizer or carbon adsorber is installed and operated that reduces VOC emissions from the subject cleaning operation by at least eighty-five percent (85%) overall. The owner or operator may use an emission control system other than an after-burner or carbon adsorber if such device reduces VOC emission from the subject cleaning operation by at least eighty-five percent (85%) by mass, the owner or operator submits a plan to the director detailing appropriate monitoring devices, test methods, record-keeping requirements, and operation parameters for such a control device, and such a plan is approved by the director and the U.S. Environmental Protection Agency (EPA) within federally-enforceable permit conditions.

(B) Cleaning Devices and Methods. The owner or operator of a facility that is subject to this rule shall employ one (1) or more of the following cleaning devices and methods:

1. Wipe cleaning;

2. Closed containers or hand-held spray bottles from which solvents are applied;

3. Cleaning equipment which has a solvent container that can be, and is, closed during cleaning operations, except when depositing and removing objects to be cleaned, and is closed during non-operation with the exception of maintenance and repair to the cleaning equipment itself; and

4. Remote reservoir cleaner, if the operator of the cleaner complies with all of the following:

A. Prevents solvent vapors from escaping from the solvent container by using such devices as a cover or a valve when the remote reservoir is not being used, cleaned, or repaired;

B. Directs solvent flow in a manner that will prevent liquid solvent from splashing outside of the remote reservoir cleaner;

C. Does not clean porous or absorbent materials, such as cloth, leather, wood, or rope;

D. Uses only solvent containers free of all liquid leaks. Auxiliary equipment, such as pumps, pipelines, or flanges, shall not have any liquid leaks, visible tears, or cracks. Any liquid leak, visible tear, or crack detected shall be repaired within one (1) calendar day, or the leaking section of the remote reservoir cold cleaner shall be drained of all solvent and shut down until it is repaired or replaced;

E. Non-atomized solvent flow method where the cleaning solvent is collected in a container or a collection system which is closed except for solvent collection openings and, if necessary, openings to avoid excessive pressure build-up inside the container; and

F. Solvent flushing method where the cleaning solvent is discharged into a container which is closed except for solvent collection openings, and, if necessary, other openings to avoid excessive pressure build-up inside the container. The discharged solvent from the equipment must be collected into containers without atomizing into the open air. The solvent may be flushed through the system by air or hydraulic pressure or by pumping.

(C) **Operating Requirements.** The owner or operator of a source subject to the requirements of this section shall comply with the following for each subject cleaning operation:

1. Cover all open containers and properly cover and store applicators used to apply cleaning solvents;
2. Dispose of all used cleaning solutions, cleaning towels, and applicators used to apply cleaning solvents in closed containers that are nonleaking and nonabsorbent;
3. Minimize air circulation around the cleaning operation; and
4. Utilize equipment practices that minimize emissions.

(D) **Control Device Inspection.** For catalytic oxidizers, the catalyst bed material shall be inspected annually for general catalyst condition and any signs of potential catalyst depletion. The owner or operator shall also collect a representative sample of the catalyst from the oxidizer, per manufacturer's recommendations, and have it tested to evaluate the catalyst's capability to continue to function at or above the required control efficiency. An evaluation of the catalyst bed material shall be conducted whenever the results of the inspection indicate signs of potential catalyst depletion or poor catalyst condition based on manufacturer's recommendations but not less than once per year.

[(4) Solvent Emission Reduction. The following provisions apply to any stationary source subject to section (3) of this rule:

(A) A thirty percent (30%) emission reduction shall be based on emissions in 1990 and in 1995. If the owner/operator demonstrates that either 1990 or 1995 is not a representative production year, then a demonstration shall be made to the agency that another year is more representative for purposes of comparison or for prorating cleaning solvent usage. The following applicable documentation of actions and associated emission reductions shall be sent to the department for approval by March 1, 1996:

- 1. Changes in cleaning solvents used;*
- 2. Changes in work practices; and*
- 3. Changes in equipment or processes; and*

(B) The changes described in subsection (4)(A) of this rule shall remain in effect until other changes resulting in greater, or equal, emission reductions from the cleaning operations are implemented.]

[(5) Recordkeeping. The person responsible for industrial cleaning operations at an affected facility seeking to comply with section (3) of this rule shall keep records of information sufficient for the calculation of emissions from each Unit Operation System (UOS) from the use of industrial cleaning solvents. A UOS consists of an industrial cleaning operation around which all organic solvent usage disposal, and fugitive losses may be calculated using a simple mass balance equation. As an aid to compliance with this section, records for industrial cleaning UOSs may include one (1) or more of the following:

(A) Engineering drawings or sketches of all UOSs used to define industrial cleaning operations within the facility, including a system boundary, organic solvent input(s), organic solvent output(s), and organic solvent evaporative loss points. These drawings shall include each of the following:

- 1. Labeled boxes within the system boundary which describe all components of the UOS, including any virgin solvent containers, solvent applicators, used solvent containers, and the surface being cleaned;*
- 2. Numbered or lettered arrows depicting liquid and/or evaporative solvent flow, accurate with respect to relative mass flow rates in and out of the system boundary; and*
- 3. Arrows depicting all organic solvent pathways within the system boundary;*

(B) One (1) accurate mass balance equation for each UOS depicted in subsection (5)(A) of this rule. Each equation shall have variables consistent with those used to define the corresponding UOS and shall be solved for total VOC emissions for the UOS; and

(C) Any assumptions or approximations made in defining the UOSs.]

(4) **Reporting and Record Keeping.** All owners and operators subject to this rule shall maintain records as required by this section sufficient to determine continuous compliance with this rule. These records shall be kept for at least five (5) years to be automatically extended if enforcement action is pending. These records shall be made available immediately upon request for review by the Department of Natural Resources' personnel and other air pollution control agencies upon presentation of proper credentials.

(A) The owner or operator of a facility that includes an industrial solvent cleaning operation shall keep records detailing specific VOC uses as necessary for the director to determine monthly compliance. All facility records must include the following:

1. A list of all solvents currently used and/or stored at the site. The list shall include the following information:

- A. Cleaning solvent type by name/code/manufacturer;
- B. The actual VOC content of the cleaning solvents, based upon EPA Method 24, of each cleaning material, in pounds per gallon of material, as applied or the VOC composite partial vapor pressures of the solvents or solvent solutions used in the industrial cleaning operations. This calculation need only be performed once for each batch of cleaning solution used; and
- C. The actual mixing ratio for the cleaning solvent as applied; and

2. Records of usage including the following information:

- A. Monthly records of total applied volume in gallons for each cleaning solvent used;
- B. Monthly records of solvent cleaning activity associated with each solvent used;
- C. Monthly records of total volume of aerosol products in ounces used; and
- D. The total monthly VOC emissions (summation of gallons \times VOC content (in pounds per gallon)).

(B) If a facility includes automatic equipment, records shall also include, as applicable, the following:

1. For a source with automatic equipment that prepares each batch of cleaning solution(s) on site, records for each batch shall include:

- A. The name and identification of each cleaning solution;
- B. The VOC content of each cleaning solvent in the cleaning solution;
- C. Each change to the setting of the automatic equipment, with date, time, description of changes in the cleaning solution constituents (e.g., cleaning solvents), and description of changes to the proportion of cleaning solvent and water (or other non-VOC);
- D. The proportion of each cleaning solvent and water (or other non-VOC) used to prepare the as-used cleaning solution;
- E. The VOC content of the as-used cleaning solution, with the supporting calculations; and
- F. A calibration log for the automatic equipment, detailing periodic checks;

2. For a source with automatic equipment that does not prepare cleaning solution(s) on site, records for each batch of cleaning solution shall include:

- A. The name and identification of each cleaning solution;
- B. Date, time of preparation, and each subsequent modification of the batch;
- C. The VOC content of each cleaning solvent in the cleaning solution;

D. The total amount of each cleaning solvent and water (or other non-VOC) used to prepare the as-used cleaning solution; and

E. The VOC content of the as-used cleaning solution, with supporting calculations; and

3. For cleaning solutions that are not prepared at the site, but are used as-purchased, the manufacturer's specifications for VOC content may be used if such manufacturer's specifications are based on the results of tests of the VOC content in accordance with EPA Method 24.

(C) Any owner or operator using an emission control device pursuant to this rule shall maintain records, on a daily basis, of key system operating parameters for emission control equipment, including, but not limited to:

1. Identification of the type of emissions control system used;
2. Hours of operation;
3. Routine and non-routine maintenance, including dates and duration of any outages;
4. Records of test reports conducted;
5. If an owner or operator of a solvent cleaning operation employs a thermal oxidizer or catalytic oxidizer to achieve and maintain compliance, the owner or operator shall comply with the following requirements:

A. Continuous temperature monitoring and continuous temperature recording equipment shall be installed and operated to accurately measure the operating temperature(s) for the control device; and

B. The following information shall be collected and recorded each day of operation of the solvent cleaning operation and the control device, and the information shall be maintained at the facility for a period of five (5) years:

(I) A log or record of the operating time for the control device, monitoring equipment, and the associated solvent cleaning operation;

(II) For thermal oxidizers, all three (3)-hour periods of operation during which the average combustion temperature was more than fifty degrees Fahrenheit (50 °F) below the average combustion temperature during the most recent emission test that demonstrated that the solvent cleaning operation was in compliance; and

(III) For catalytic oxidizers, all three (3)-hour periods of operation during which the average temperature of the dryer exhaust gases immediately before the catalyst bed was more than fifty degrees Fahrenheit (50 °F) below the average temperature of the dryer exhaust gases during the most recent emission test that demonstrated that the solvent cleaning operation was in compliance, and all three (3)-hour periods during which the average temperature difference across the catalyst bed was less than eighty percent (80%) of the average temperature difference during the most recent emission test that demonstrated that the solvent cleaning operation was in compliance; and

6. If an owner or operator of a solvent cleaning operation employs a carbon adsorption system to achieve and maintain compliance, the owner or operator shall comply with the following requirements:

A. Monitoring and recording equipment that records all of the following shall be installed and operated for the carbon adsorption system:

(I) A continuous emission monitoring and recording system that is capable of accurately measuring and recording the concentration of organic compounds in the exhaust gases from the carbon adsorption system;

(II) Monitoring and recording equipment that are capable of accurately measuring and recording the total mass steam flow rate for each regeneration cycle of each carbon bed; and

(III) Monitoring and recording equipment that are capable of accurately measuring and recording the temperature

of each carbon bed after regeneration (and after completion of any cooling cycle(s)); and

B. The following information shall be collected and recorded each day of operation of the solvent cleaning operation and the carbon adsorption system:

(I) A log or record of the operating time for the carbon adsorption system, monitoring equipment, and the associated solvent cleaning operation;

(II) For a carbon adsorption system that employs a continuous emission monitoring and recording system to measure and record the concentration of organic compounds in the exhaust gases, all three (3)-hour periods of operation during which the average concentration level or reading in the exhaust gases is more than twenty percent (20%) greater than the exhaust gas organic compound concentration level or reading measured by the most recent performance test that demonstrated that the solvent cleaning operation was in compliance;

(III) For a carbon adsorption system that employs monitoring and recording equipment to measure and record the total mass steam flow rate for each regeneration cycle of each carbon bed, all carbon bed regeneration cycles during which the total mass steam flow rate was more than ten percent (10%) below the total mass steam flow rate during the most recent performance test that demonstrated that the solvent cleaning operation was in compliance; and

(IV) For a carbon adsorption system that employs monitoring and recording equipment to measure and record the temperature of each carbon bed after regeneration (and after completion of any cooling cycle(s)) was more than ten percent (10%) greater than the carbon bed temperature during the most recent performance test that demonstrated that the solvent cleaning operation was in compliance.

(5) Test Methods. Certain test methods mentioned in this rule may be found in 10 CSR 10-6.030. Other EPA test methods specific to this rule may be found in 40 CFR 60, Appendix A.

(A) Control Efficiency Testing. To demonstrate compliance with the emission limits of subsection (3)(C) of this rule, an initial emission test shall be performed after any required control equipment is installed. The emission limits shall not have been met until compliance has been verified through this testing. Testing shall also be required after significant modifications to any control equipment required by this rule. Significant modifications include any repairs or changes that might substantially alter or affect the overall control efficiency. This subsection outlines the methods to be used for any such testing.

1. The emission unit shall be run at typical operating conditions and flow rates compatible with scheduled production during any emission testing.

2. EPA Method 1 or 1A, as appropriate, shall be used to select the sampling sites.

3. EPA Method 2, 2A, 2C, or 2D, as appropriate, shall be used to determine the velocity and volumetric flow rate of the exhaust stream.

4. EPA Method 3 or 3A, as appropriate, shall be used to determine the concentration of Oxygen (O₂) and Carbon Dioxide (CO₂).

5. EPA Method 4 shall be used to determine moisture content.

6. EPA Method 18, 25, or 25A shall be used to determine the VOC concentration of the exhaust stream entering and exiting the control device, unless the alternate limit in paragraph (3)(C)2. of this rule is being used for compliance, in which case only the VOC concentration of the exit exhaust shall be determined. In cases where the anticipated outlet VOC concentration of the control device is less than fifty parts per million by volume (50 ppmv) as carbon, EPA Method 25A shall be used.

7. If EPA Method 25A is used—

A. The outlet readings from a thermal or catalytic oxidizer may be corrected by using EPA Method 18 or 25 to determine non-VOC components (methane and ethane) and subtracting these from the Method 25A result; and

B. The director may require a retest by EPA Method 18 or 25 if the average corrected outlet reading is greater than fifty (50) ppmv VOC as carbon.

8. A compliance test shall consist of up to three (3) separate runs, each lasting a minimum of sixty (60) minutes unless the director determines that the circumstances dictate shorter sampling times.

9. EPA Method 25 specifies a minimum probe temperature of two hundred sixty-five degrees Fahrenheit (265 °F). To prevent condensation, the probe should be heated to at least the gas stream temperature, typically close to three hundred fifty degrees Fahrenheit (350 °F).

10. EPA Method 25A specifies a minimum temperature of two hundred twenty degrees Fahrenheit (220 °F) for the sampling components leading to the analyzer. To prevent condensation when testing heatset printing presses, the sampling components and flame ionization detector lock should be heated to at least the gas stream temperature, typically close to three hundred fifty degrees Fahrenheit (350 °F).

11. The oxidizer operating temperature or the temperature of the gas upstream of the catalyst bed may be used as the operating parameter for determining continuous compliance with the emission standard of subsection (3)(C) of this rule. This temperature shall be computed as the time-weighted average of the temperature values recorded during the test. The owner or operator must maintain the oxidizer at a three (3)-hour average temperature no less than fifty degrees Fahrenheit (50 °F) below the average temperature observed during the most recent stack test to demonstrate continuous compliance.

12. Use of an adaptation to any of the methods specified in this subsection may be approved by the director on a case-by-case basis. The owner or operator shall submit sufficient documentation for the director to find that the methods specified in this subsection will yield inaccurate results and that the proposed adaptation is appropriate.

13. To determine capture efficiency, use the procedure in 10 CSR 10-6.030(20).

(B) VOC Content Testing for Cleaning Solutions. The VOC content or VOC composite partial vapor pressure of cleaning solutions shall be determined by one (1) of the following:

1. Analysis by EPA Method 24 for VOC content or by an appropriate method for VOC composite partial vapor pressure of a sample of the cleaning solution. The analysis may be performed by the supplier of those materials;

2. Calculation for VOC content that combines EPA Method 24 analytical data for the concentrated materials used to prepare the cleaning solution and the proportions in which they are mixed to make the cleaning solution as applied. Owners or operators may use formulation information provided with the concentrated materials used to prepare the cleaning solution, such as the container label, the product data sheet, or the Material Safety Data Sheet (MSDS) to document the VOC content of the concentrated material; or

3. If cleaning is not diluted prior to use, MSDS or manufacturer's formulation data sheet may be used.

AUTHORITY: section 643.050, RSMo Supp. [1995] 2010. Original rule filed Oct. 7, 1994, effective May 28, 1995. Amended: Filed July 15, 1996, effective Feb. 28, 1997. Amended: Filed Nov. 30, 2010.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars (\$500) in the aggregate.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: A public hearing on this proposed amendment will begin at 9:00 a.m., February 3, 2011. The public hearing will be held at the Doubletree Hotel and Conference Center, Ballrooms C, D, and E, 16625 Swingley Ridge Road, Chesterfield, Missouri. Opportunity to be heard at the hearing shall be afforded any interested person. Interested persons, whether or not heard, may submit a written or email statement of their views until 5:00 p.m., February 10, 2011. Written comments shall be sent to Chief, Air Quality Planning Section, Missouri Department of Natural Resources' Air Pollution Control Program, PO Box 176, Jefferson City, MO 65102-0176. Email comments shall be sent to apcprulespn@dnr.mo.gov.

**Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 10—Air Conservation Commission
Chapter 6—Air Quality Standards, Definitions, Sampling
and Reference Methods and Air Pollution Control
Regulations for the Entire State of Missouri**

PROPOSED AMENDMENT

10 CSR 10-6.020 Definitions and Common Reference Tables. The commission proposes to amend subsections (2)(A)–(2)(J) and (2)(L)–(2)(W). If the commission adopts this rule action, it will be the department's intention to submit this rule amendment to the U.S. Environmental Protection Agency to replace the current rule that is in the Missouri State Implementation Plan. The evidence supporting the need for this proposed rulemaking is available for viewing at the Missouri Department of Natural Resources' Air Pollution Control Program at the address listed in the Notice of Public Hearing at the end of this rule. More information concerning this rulemaking can be found at the Missouri Department of Natural Resources' Environmental Regulatory Agenda website, www.dnr.mo.gov/regs/index.html.

PURPOSE: This rule defines key words and expressions used in Chapters 1 through 6 and provides common reference tables. This amendment will add all of the definitions currently found in individual Division 10 air rules into the general definitions rule unless a specific reason exists for a definition to be unique to a specific rule. The evidence supporting the need for this proposed rulemaking, per section 536.016, RSMo, is public hearing testimony.

PURPOSE: This rule defines key words and expressions used in [c]Chapters 1 through 6 and provides common reference tables.

(2) Definitions.

(A) All terms beginning with "A."

1. Abatement project designer—An individual who designs or plans Asbestos Hazard Emergency Response Act (AHERA) asbestos abatement.

2. Account certificate of representation—The completed and signed submission for certifying the designation of a nitrogen oxides (NO_x) authorized account representative for an affected unit or a group of identified affected units who is authorized to represent the owners or operators of such unit(s) and of the affected units at such source(s) with regard to matters under an NO_x trading program.

3. Account holder—Any person that chooses to participate in the program by generating, buying, selling, or trading emission reduction credits (ERCs).

4. Account number—The identification number given to each NO_x allowance tracking system account.

5. Acid rain emissions limitation—As defined in 40 CFR 72.2, a limitation on emissions of sulfur dioxide or nitrogen

oxides under the acid rain program under Title IV of the Clean Air Act.

6. Acrylonitrile-butadiene-styrene (ABS) plastic solvent welding—A process to weld ABS pipe.

[2./7. Act—The Clean Air Act, 42 U.S.C. 7401. References to the word Title pertain to the titles of the Clean Air Act Amendments of 1990, P.L. 101-595.

8. Active collection system—A gas collection system that uses gas mover equipment.

9. Active landfill—A landfill in which solid waste is being placed or a landfill that is planned to accept waste in the future.

[3./10. Actual emissions—The actual rate of emissions of a pollutant from a source operation is determined as follows:

A. Actual emissions as of a particular date shall equal the average rate, in tons per year, at which the source operation or installation actually emitted the pollutant during the previous two (2)-year period and which represents normal operation. A different time period for averaging may be used if the director determines it to be more representative. Actual emissions shall be calculated using actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period;

B. The director may presume that source-specific allowable emissions for a source operation or installation are equivalent to the actual emissions of the source operation or installation; and

C. For source operations or installations which have not begun normal operations on the particular date, actual emissions shall equal the potential emissions of the source operation or installation on that date.

[4./11. Adequately wet—To sufficiently mix or penetrate with liquid to prevent the release of particulates. If visible emissions are observed coming from asbestos-containing material, then that material has not been adequately wetted. However, the absence of visible emissions is not sufficient evidence of being adequately wet.

12. Adhesion primer—A coating that is applied to a polyolefin part to promote the adhesion of a subsequent coating. An adhesion prime is clearly identified as an adhesion prime or adhesion promoter on its material safety data sheet.

13. Adhesive—Any chemical substance that is applied for the purpose of bonding two (2) surfaces together other than by mechanical means. For the purpose of 10 CSR 10-5.330 only, an adhesive is considered a surface coating.

14. Adhesive application process—A series of one (1) or more adhesive applicators and any associated drying area and/or oven wherein an adhesive is applied, dried, and/or cured. An application process ends at the point where the adhesive is dried or cured, or prior to any subsequent application of a different adhesive. It is not necessary for an application process to have an oven or flash-off area.

15. Adhesive primer—A product intended by the manufacturer for application to a substrate, prior to the application of an adhesive, to provide a bonding surface.

[5./16. Administrator—The regional administrator for Region VII, U.S. Environmental Protection Agency (EPA). **For the purpose of 10 CSR 10-6.360 only, administrator is the administrator of the U.S. Environmental Protection Agency or the administrator's duly-authorized representative.**

[6./17. Adsorption cycle—The period during which the adsorption system is adsorbing and not desorbing.

[7./18. Adverse impact on visibility—The visibility impairment which interferes with the protection, preservation, management, or enjoyment of the visitor's visual experience of a Class I area, which is an area designated as Class I in 10 CSR 10-6.060(11)(A) Table 1. This determination must be made on a case-by-case basis taking into account the geographic extent, intensity, duration, frequency, and time of visibility impairments[,] and how these factors correlate with the times of visitor use of the Class I area and the frequency and timing of natural conditions that reduce visibility.

19. Aerospace manufacture and/or rework facility—Any installation that produces, reworks, or repairs in any amount any commercial, civil, or military aerospace vehicle or component.

20. Aerospace vehicle or component—Any fabricated part, processed part, assembly of parts, or completed unit, with the exception of electronic components, of any aircraft.

21. Affected federal land manager—The federal agency or the federal official charged with direct responsibility for management of an area designated as Class I under the Clean Air Act (42 U.S.C. 7472) that is located within one hundred kilometers (100 km) of the proposed federal action.

[8./22. Affected source—A source that includes one (1) or more emission units subject to emission reduction requirements or limitations under Title IV of the Act. **For the purpose of 10 CSR 10-5.530 only, affected source is a wood furniture manufacturing facility that meets the criteria listed in subsections (1)(A) and (1)(B) of 10 CSR 10-5.530.**

[9./23. Affected states—All states contiguous to the permitting state whose air quality may be affected by the modification, renewal, or issuance of, or is within fifty (50) miles of, a source subject to permitting under Title V of the Act.

[10./24. Affected unit—A unit that is subject to emission reduction requirements or limitations under Title IV of the Act.

25. Affiliate—Any person, including an individual, corporation, service company, corporate subsidiary, firm, partnership, incorporated or unincorporated association, political subdivision including a public utility district, city, town, county, or a combination of political subdivisions, that directly or indirectly, through one (1) or more intermediaries, controls, is controlled by, or is under common control with the regulated electrical corporation.

[11./26. AHERA—See Asbestos Hazard Emergency Response Act [of 1986 (P.L. 99-519)].

[12./27. Air cleaning device—Any method, process, or equipment which removes, reduces, or renders less obnoxious air contaminants discharged into the ambient air.

[13./28. Air contaminant—Any particulate matter or any gas or vapor or any combination of them.

[14./29. Air contaminant source—Any and all sources of emission of air contaminants whether privately or publicly owned or operated.

[15./30. Air-dried coating—The coatings which are dried by the use of air or forced warm air at temperatures up to ninety degrees Celsius (90 °C) (one hundred ninety-four degrees Fahrenheit (194 °F)).

31. Air pollutant—Agent, or combination of agents, including any physical, chemical, biological, radioactive (including source material, special nuclear material, and by-product material) substance, or matter which is emitted into or otherwise enters the ambient air. Such term includes any precursors to the formation of any air pollutant, to the extent the staff director has identified such precursor(s) for the particular purpose for which the term "air pollutant" is used.

[16./32. Air pollution—The presence in the ambient air of one (1) or more air contaminants in quantities, of characteristics, and of a duration which directly and approximately cause or contribute to injury to human, plant, or animal life or health, or to property or which unreasonably interfere with the enjoyment of life or use of property.

33. Air pollution alert—The level of an air pollution episode known as an air pollution alert is that condition when the concentration of air contaminants reach the level at which the first stage control actions are to begin.

34. Air Stagnation Advisory—A special bulletin issued by the National Weather Service entitled "Air Stagnation Advisory," which is used to warn air pollution control agencies that stagnant atmospheric conditions are expected which could cause increased concentrations of air contaminants near the ground.

35. Air-tight cleaning system—A degreasing machine that is automatically operated and seals at a differential pressure no greater than one-half (0.5) pound per square inch gauge (psig) during all cleaning and drying cycles.

36. Airless cleaning system—A degreasing machine that is automatically operated and seals at a differential pressure of twenty-five (25) torr (twenty-five millimeters of mercury (25 mmHg) (0.475 pound per square inch (psi)) or less, prior to the introduction of solvent vapor into the cleaning chamber and maintains differential pressure under vacuum during all cleaning and drying cycles.

37. Alcohol—Refers to isopropanol, isopropyl alcohol, normal propyl alcohol, or ethanol.

38. Alcohol substitutes—Nonalcohol additives that contain volatile organic compounds (VOCs) and are used in the fountain solution.

39. Allocate or allocation—The determination by the director or the administrator of the number of NO_x allowances to be initially credited to a NO_x budget unit or an allocation set-aside.

[17.]40. Allowable emissions—The emission rate calculated using the maximum rated capacity of the installation (unless the source is subject to enforceable permit conditions which limit the operating rate or hours of operation, or both) and the most stringent of the following:

A. Emission limit established in any applicable emissions control rule including those with a future compliance date; or

B. The emission rate specified as a permit condition.

[18.]41. Allowance—An authorization, allocated to an affected unit by the administrator under Title IV of the Act, to emit, during or after a specified calendar year, one (1) ton of sulfur dioxide (SO₂).

42. Alternate authorized account representative—The alternate person who is authorized by the owners or operators of the unit to represent and legally bind each owner and operator in matters pertaining to the Emissions Banking and Trading Program or any other trading program in place of the authorized account representative.

[19.]43. Alternate site analysis—An analysis of alternative sites, sizes, production processes, and environmental control techniques for the proposed source which demonstrates that benefits of the proposed installation significantly outweigh the environmental and social costs imposed as a result of its location, construction, or modification.

44. Alternative method—Any method of sampling and analyzing for an air pollutant that is not a reference or equivalent method but that has been demonstrated to the director's satisfaction to, in specific cases, produce results adequate for a determination of compliance.

[20.]45. Ambient air—All space outside of buildings, stacks, or exterior ducts.

[21.]46. Ambient air increments—The limited increases of pollutant concentrations in ambient air over the baseline concentration.

47. Ancillary refueling system—Any gasoline-dispensing installation, including related equipment, that shares a common storage tank with an initial fueling system. The purpose of an ancillary refueling system is to refuel in-use motor vehicles equipped with onboard refueling vapor recovery (ORVR) at automobile assembly plants.

48. Animal matter—Any product or derivative of animal life.

[22.]49. Anode bake plant—A facility which produces carbon anodes for use in a primary aluminum reduction installation.

50. Antifoulant coating—A coating applied to the underwater portion of a pleasure craft to prevent or reduce the attachment of biological organisms and registered with the U.S. Environmental Protection Agency (EPA) as a pesticide under the federal Insecticide, Fungicide, and Rodenticide Act (7 United States Code Section 136).

51. Antifoulant sealer/tie coating—A coating applied over biocidal antifoulant coating for the purpose of preventing release of biocides into the environment and/or to promote adhesion between an antifoulant and a primer or other antifoulant.

52. Antique aerospace vehicle or component—An aircraft or component thereof that was built at least thirty (30) years ago. An antique aerospace vehicle would not routinely be in commercial or military service in the capacity for which it was designed.

53. Applicability analysis—The process of determining if the federal action must be supported by a conformity determination.

54. Applicable implementation plan or applicable state implementation plan (SIP)—The portion (or portions) of the SIP or most recent revision thereof, which has been approved under section 110(k) of the Act, a federal implementation plan promulgated under section 110(c) of the Act, or a plan promulgated or approved pursuant to section 301(d) of the Act (tribal implementation plan) and which implements the relevant requirements of the Act.

[23.]55. Applicable requirement—All of the following listed in the Act:

A. Any standard or requirement provided for in the implementation plan approved or promulgated by EPA through rulemaking under Title I of the Act that implements the relevant requirements, including any revisions to that plan promulgated in 40 CFR [part] 52;

B. Any term or condition of any preconstruction permit issued pursuant to regulations approved or promulgated through rulemaking under Title I, including part C or D of the Act;

C. Any standard or requirement under section 111 of the Act, including section 111(d);

D. Any standard or requirement under section 112 of the Act, including any requirement concerning accident prevention under section 112(r)(7);

E. Any standard or requirement of the acid rain program under Title IV of the Act or the regulations promulgated under it;

F. Any requirements established pursuant to section 504(b) or section 114(a)(3) of the Act;

G. Any standard or requirement governing solid waste incineration[,] under section 129 of the Act;

H. Any standard or requirement for consumer and commercial products[,] under section 183(e) of the Act;

I. Any standard or requirement for tank vessels under section 183(f) of the Act;

J. Any standard or requirement of the program to control air pollution from outer continental shelf sources[,] under section 328 of the Act;

K. Any standard or requirement of the regulations promulgated to protect stratospheric ozone under Title VI of the Act, unless the administrator has determined that these requirements need not be contained in a Title V permit;

L. Any national ambient air quality standard or increment or visibility requirement under part C of Title I of the Act, but only as it would apply to temporary sources permitted pursuant to section 504(e); and

M. Any standard or requirement established in sections 643.010–643.190, RSMo, of the Missouri Air Conservation Law and rules adopted under them.

[24.]56. Approved source—A source of fuel which has been found by the department director, after the tests as s/he may require, to be in compliance with [these] applicable rules.

57. Aqueous solvent—A solvent in which water is the primary ingredient (greater than eighty percent (80%) by weight or greater than sixty percent (60%) by volume of solvent solution as applied must be water). Detergents, surfactants, and bioenzyme mixtures and nutrients may be combined with the water along with a variety of additives such as organic solvents (e.g., high boiling point alcohols), builders, saponifiers, inhibitors, emulsifiers, pH buffers, and antifoaming agents. Aqueous solutions

must have a flash point greater than ninety-three degrees Celsius (93 °C) (two hundred degrees Fahrenheit (200 °F)) (as reported by the manufacturer) and the solution must be miscible with water.

58. Architectural coating—A coating recommended for field application to stationary structures and their appurtenances, to portable buildings, to pavements, or to curbs. This definition excludes adhesives and coatings recommended by the manufacturer or importer solely for shop applications or solely for application to non-stationary structures, such as airplanes, ships, boats, and railcars.

59. Area—Any or all regions within the boundaries of the state of Missouri, as specified.

[25.]60. Area of the state—Any geographical area designated by the commission.

61. Area-wide air quality modeling analysis—An assessment on a scale that includes the entire nonattainment or maintenance area using an air quality dispersion model or photochemical grid model to determine the effects of emissions on air quality; for example, an assessment using EPA's community multi-scale air quality (CMAQ) modeling system.

62. As applied—The VOC and solids content of the finishing material that is actually used for coating the substrate. It includes the contribution of materials used for in-house dilution of the finishing material.

[26.]63. Asbestos—The asbestiform varieties of chrysotile, crocidolite, amosite, anthophyllite, tremolite, and actinolite.

[27.]64. Asbestos abatement—The encapsulation, enclosure, or removal of asbestos-containing materials, in or from a building, or air contaminant source; or preparation of friable asbestos-containing material prior to demolition.

[28.]65. Asbestos abatement contractor—Any person who by agreement, contractual or otherwise, conducts asbestos abatement projects at a location other than his/her own place of business.

[29.]66. Asbestos abatement project—An activity undertaken to encapsulate, enclose, or remove ten (10) square feet or sixteen (16) linear feet or more of friable asbestos-containing materials from buildings and other air contaminant sources[,] or to demolish buildings and other air contaminant sources containing ten (10) square feet or sixteen (16) linear feet or more.

[30.]67. Asbestos abatement supervisor—An individual who directs, controls, or supervises others in asbestos abatement projects.

[31.]68. Asbestos abatement worker—An individual who engages in asbestos abatement projects.

[32.]69. Asbestos air sampling professional—An individual who by qualifications and experience is proficient in asbestos abatement air monitoring. The individual shall conduct, oversee, or be responsible for air monitoring of asbestos abatement projects before, during, and after the project has been completed.

[33.]70. Asbestos air sampling technician—An individual who has been trained by an air sampling professional to do air monitoring. That individual conducts air monitoring of an asbestos abatement project before, during, and after the project has been completed.

[34.]71. Asbestos-containing material (ACM)—Any material or product which contains more than one percent (1%) asbestos, by weight.

[35.]72. Asbestos debris—Material that results from removal or deterioration of asbestos-containing material.

[36.]73. Asbestos Hazard Emergency Response Act (AHERA)—*[(AHERA) of]* Law enacted in 1986 (P.L. 99-519) that directs EPA to develop a regulatory framework to require schools to inspect their building(s) for asbestos and take appropriate abatement actions using qualified, accredited persons for inspection and abatement.

[37.]74. Asbestos projects—An activity undertaken to remove or encapsulate one hundred sixty (160) square feet or two hundred sixty (260) linear feet or more of friable asbestos-containing materi-

als or demolition of any structure or building or a part of it containing the previously-mentioned quantities of asbestos-containing materials.

[38.]75. Asbestos removal project—An asbestos abatement project consisting of activities that involve, and are required[,/] to take out, friable asbestos-containing materials from any facility. This definition includes, but is not limited to, activities associated with the cleanup of loose friable asbestos-containing debris or refuse, or both, from floors and other surfaces.

[39.]76. ASME—American Society of Mechanical Engineers, 345 East 47th Street, New York, NY 10017.

[40.]77. Asphalt prime coat—Application of low-viscosity liquid asphalt to an absorbent surface such as a previously-untreated surface.

[41.]78. Asphalt seal coat—An application of a thin asphalt surface treatment used to waterproof and improve the texture of an absorbent surface or a nonabsorbent surface such as asphalt or concrete.

[42.]79. ASTM—American Society for Testing and Materials, 1916 Race Street, Philadelphia, PA 19103.

80. Authorized account representative—The person who is authorized by the owners or operators of the unit to represent and legally bind each owner and operator in matters pertaining to the Emissions Banking and Trading Program or any other budget trading program.

81. Automated data acquisition and handling system (DAHS)—That component of the Continuous Emissions Monitoring System (CEMS), or other emissions monitoring system approved for use by the department, designed to interpret and convert individual output signals from pollutant concentration monitors, diluent gas monitors, and other component parts of the monitoring system to produce a continuous record of the measured parameters in approved measurement units.

82. Automatic blanket wash system—Equipment used to clean lithographic blankets which can include, but is not limited to, those utilizing a cloth and expandable bladder, brush, spray, or impregnated cloth system.

[43.]83. Automobile—A four (4)-wheel passenger motor vehicle or derivative capable of seating no more than twelve (12) passengers.

84. Automobile and light duty truck adhesive—An adhesive, including glass bonding adhesive, used at an automobile or light duty truck assembly coating installation, applied for the purpose of bonding two (2) motor vehicle surfaces together without regard to the substrates involved.

85. Automobile and light duty truck bedliner—A multi-component coating, used at an automobile or light duty truck assembly coating installation, applied to a cargo bed after the application of topcoat and outside of the topcoat operation to provide additional durability and chip resistance.

86. Automobile and light duty truck cavity wax—A coating, used at an automobile or light duty truck assembly coating installation, applied into the cavities of the motor vehicle primarily for the purpose of enhancing corrosion protection.

87. Automobile and light duty truck deadener—A coating, used at an automobile or light duty truck assembly coating installation, applied to selected motor vehicle surfaces primarily for the purpose of reducing the sound of road noise in the passenger compartment.

88. Automobile and light duty truck gasket/gasket-sealing material—A fluid, used at an automobile or light duty truck assembly coating installation, applied to coat a gasket or replace and perform the same function as a gasket. Automobile and light duty truck gasket/gasket-sealing material includes room temperature vulcanization (RTV) seal material.

89. Automobile and light duty truck glass bonding primer—A primer, used at an automobile or light duty truck assembly coating installation, applied to windshield or other glass, or to

body openings, to prepare the glass or body opening for the application of glass bonding adhesives or the installation of adhesive bonded glass. Automobile and light duty truck glass bonding primer includes glass bonding/cleaning primers that perform both functions (cleaning and priming of the windshield or other glass or body openings) prior to the application of adhesive or the installation of adhesive bonded glass.

90. Automobile and light duty truck lubricating wax/compound—A protective lubricating material, used at an automobile or light duty truck assembly coating installation, applied to motor vehicle hubs and hinges.

91. Automobile and light duty truck sealer—A high viscosity material, used at an automobile or light duty truck assembly coating installation, generally, but not always, applied in the paint shop after the body has received an electrodeposition primer coating and before the application of subsequent coatings (e.g., primer-surfacer). Such materials are also referred to as sealant, sealant primer, or caulk.

[44.]92. Automobile and light[-] duty truck surface coating operations—The application, flashoff, and curing of prime, primer-surfacer, topcoat, and final repair coatings during the assembly of passenger cars and light duty trucks excluding the following operations:

- A. Wheel coatings;
- B. Miscellaneous antirust coatings;
- C. Truck interior coatings;
- D. Interior coatings;
- E. Flexible coatings;
- F. Sealers and adhesives; and

G. Plastic parts coatings. (Customizers, body shops, and other repainters are not part of this definition.)

93. Automobile and light duty truck trunk interior coating—A coating, used at an automobile or light duty truck assembly coating installation outside of the primer-surfacer and topcoat operations, applied to the trunk interior to provide chip protection.

94. Automobile and light duty truck underbody coating—A coating, used at an automobile or light duty truck assembly coating installation, applied to the undercarriage or firewall to prevent corrosion and/or provide chip protection.

95. Automobile and light duty truck weatherstrip adhesive—An adhesive, used at an automobile or light duty truck assembly coating installation, applied to weatherstripping material for the purpose of bonding the weatherstrip material to the surface of the motor vehicle.

[45.]96. Automotive underbody deadeners—Any coating applied to the underbody of a motor vehicle to reduce the noise reaching the passenger compartment.

97. Auxiliary power unit (APU)—An integrated system that—

A. Provides heat, air conditioning, engine warming, or electricity to components on a heavy duty vehicle; and

B. Is certified by the Administrator under part 89 of Title 40, *Code of Federal Regulations* (or any successor regulation), as meeting applicable emissions standards.

98. Average emission rate—The simple average of the hourly NO_x emission rate as recorded by approved monitoring systems.

(B) All terms beginning with “B.”

1. Bag leak detection system—An instrument that is capable of monitoring particulate matter loadings in the exhaust of a fabric filter in order to detect bag failures. A bag leak detection system includes, but is not limited to, an instrument that operates on triboelectric, light-scattering, light-transmittance, or other effects to monitor relative particulate matter loadings.

2. Baked coating—A coating that is cured at a temperature at or above one hundred ninety-four degrees Fahrenheit (194 °F).

[1.]3. Base year—The year chosen in the state implementation plan to directly correlate emissions of the nonattainment pollutant in the nonattainment area with ambient air quality data pertaining to the

pollutant. From the base year, projections are made to determine when the area will attain and maintain the ambient air quality standards.

4. Basecoat—A coat of colored material, usually opaque, that is applied after primer but before graining inks, glazing coats, or other opaque finishing materials and is usually top-coated for protection.

[2.]5. Baseline area—The continuous area in which the source constructs as well as those portions of the intrastate area which are not part of a nonattainment area and which would receive an air quality impact equal to or greater than one microgram per cubic meter ($1 \mu\text{g}/\text{m}^3$) annual average (established by modeling) for each pollutant for which an installation receives a permit under 10 CSR 10-6.060(8) and for which increments have been established in 10 CSR 10-6.060(11)(A), Table 1. Each of these areas are references to the standard United States Geological Survey (USGS) County-Township-Range-Section system. The smallest unit of area for which a baseline date will be set is one (1) section (one (1) square mile).

[3.]6. Baseline concentration—That ambient concentration level which exists at locations of anticipated maximum air quality impact or increment consumption within a baseline area at the time of the applicable baseline date, minus any contribution from installations, modifications, and major modifications subject to 10 CSR 10-6.060(8) or subject to 40 CFR 52.21 on which construction commenced on or after January 6, 1975, for sulfur dioxide and particulate matter, and February 8, 1988, for nitrogen dioxide. The baseline concentration shall include contributions from:

A. The actual emissions of other installations in existence on the applicable baseline date; and

B. The potential emissions of installations and major modifications which commenced construction before January 6, 1975, but were not in operation by the applicable baseline date.

[4.]7. Baseline date—The date, for each baseline area, of the first complete application after August 7, 1977, for sulfur dioxide and particulate matter, and February 8, 1988, for nitrogen dioxide for a permit to construct and operate an installation subject to 10 CSR 10-6.060(8) or subject to 40 CFR 52.21.

8. Basic state installations—Installations which meet any of the following criteria, but are not part 70 installations:

A. Emit or have the potential to emit any air pollutant in an amount greater than the *de minimis* levels. The fugitive emissions of an installation shall not be considered unless the installation belongs to one (1) of the source categories listed in to 10 CSR 10-6.020(3)(B), Table 2; or

B. Either of the following criteria, provided the U.S. EPA administrator has deferred a decision on whether the installation would be subject to part 70:

(I) Are subject to a standard, limitation, or other requirement under section 111 of the Act, including area sources subject to a standard, limitation, or other requirement under section 111 of the Act; or

(II) Are subject to a standard or other requirement under section 112 of the Act, except that a source is not required to obtain a permit solely because it is subject to rules or requirements under section 112(r) of the Act, including area sources subject to a standard or other requirement under section 112 of the Act, except that an area source is not required to obtain a permit solely because it is subject to regulations or requirements under section 112(r) of the Act.

9. Batch—A discontinuous process involving the bulk movement of material through sequential manufacturing steps, typically characterized as non-steady-state.

10. Batch cycle—A manufacturing event of an intermediate or product from start to finish in a batch process.

11. Batch HMIWI—A hospital medical infectious waste incinerator that is designed such that neither waste charging nor ash removal can occur during combustion.

12. Batch process operation—A discontinuous operation in which a discrete quantity or batch of feed is charged into a chemical manufacturing process unit and distilled or reacted, or otherwise used at one (1) time, and may include, but is not limited to, reactors, filters, dryers, distillation columns, extractors, crystallizers, blend tanks, neutralizer tanks, digesters, surge tanks, and product separators. After each batch process operation, the equipment is generally emptied before a fresh batch is started.

13. Batch process train—The collection of equipment (e.g., reactors, filters, dryers, distillation columns, extractors, crystallizers, blend tanks, neutralizer tanks, digesters, surge tanks, and product separators) configured to produce a product or intermediate by a batch process operation. A batch process train terminates at the point of storage of the product or intermediate being produced in the batch process train. Irrespective of the product being produced, a batch process train which is independent of other processes shall be considered a single batch process train for purposes of rule 10 CSR 10-5.540.

14. Batch-type charcoal kiln—Charcoal kilns that manufacture charcoal with a batch process rather than a continuous process. The batch-type charcoal kiln process typically includes loading wood, sealing the kiln, igniting the wood, and controlled burning of the wood to produce charcoal which is unloaded.

[5./15. Best available control technology (BACT)—An emission limitation (including a visible emission limit) based on the maximum degree of reduction for each pollutant which would be emitted from any proposed installation or major modification which the director on a case-by-case basis, taking into account energy, environmental and economic impacts, and other costs, determines is achievable for the installation or major modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of the pollutant. In no event shall application of BACT result in emissions of any pollutant which would exceed the emissions allowed by any applicable emissions control regulation, including New Source Performance Standards established in 10 CSR 10-6.070 and 40 CFR [part] 60 and National Emissions Standards for Hazardous Pollutants established in 10 CSR 10-6.080 and 40 CFR [part] 61. If the director determines that technological or economic limitations on the application of measurement methodology to a particular source operation would make the imposition of an emission limitation infeasible, a design, equipment, work practice, operational standard, or combination of these may be prescribed instead to require the application of BACT. This standard, to the degree possible, shall set forth the emission reduction achievable by implementation of the design, equipment, work practice, or operation and shall provide for compliance by means which achieve equivalent results.

16. Beverage alcohol—Consumable products and their process intermediates and by-products, consisting of ethanol or mixtures of ethanol and non-volatile organic liquids.

17. Biologicals—Preparations made from living organisms and their products, including vaccines, cultures, etc., intended for use in diagnosing, immunizing, or treating humans or animals or in research pertaining thereto.

18. Black start unit—Any electric generating unit operated only in the event of a complete loss of power.

19. Blood products—Any product derived from human blood, including but not limited to blood plasma, platelets, red or white blood corpuscles, and other derived licensed products, such as interferon, etc.

20. Body fluids—Liquid emanating or derived from humans and limited to blood; dialysate, amniotic, cerebrospinal, synovial, pleural, peritoneal, and pericardial fluids; and semen and vaginal secretions.

21. Boiler—An enclosed fossil or other fuel-fired combustion device used to produce heat and to transfer heat to recirculating water, steam, or other medium.

[6./22. Building—Any structure excluding single-family, owner-occupied dwellings, and vacant public- or privately-owned residential structures of four (4) dwelling units or less being demolished for the sole purpose of public health, safety, or welfare. Excluded structures must be geographically dispersed, demolished pursuant to a public safety determination, and [must pose] posing a threat to public safety.

23. Bulk plant—Any gasoline storage and distribution facility that receives gasoline by pipeline, ship or barge, or cargo tank and subsequently loads the gasoline into gasoline cargo tanks for transport to gasoline dispensing facilities, and has a gasoline throughput of less than twenty thousand (20,000) gallons per day. Gasoline throughput shall be the maximum calculated design throughput as may be limited by compliance with an enforceable condition under federal, state, or local law.

24. Bulk terminal—Any gasoline storage and distribution facility that receives gasoline by pipeline, ship or barge, or delivery tank and has a gasoline throughput of twenty thousand (20,000) gallons per day or greater. Gasoline throughput shall be the maximum calculated design throughput as may be limited by compliance with an enforceable condition under federal, state, or local law.

25. Burn cycle—The burn cycle for a charcoal kiln begins at the time that a batch of wood is initially lit and ends when the burn for that batch is completed and the kiln is sealed. The burn cycle does not include cool-down time.

26. Business day—All days, excluding Saturdays, Sundays, and state holidays, that a facility is open to the public.

27. Business machine—A device that uses electronic or mechanical methods to process information, perform calculations, print or copy information, or convert sound into electrical impulses for transmission, including devices listed in standard industrial classification numbers 3572, 3573, 3574, 3579, and 3661 and photocopy machines, a subcategory of standard industrial classification number 3861.

28. By compound—By individual stream components, not carbon equivalents.

29. Bypass stack—A device used for discharging combustion gases to avoid severe damage to the air pollution control device or other equipment.

(C) All terms beginning with "C."

1. CAA—The Clean Air Act, as amended; see also "Act."

2. Camouflage coating—A coating, used principally by the military, to conceal equipment from detection.

3. Capacity factor—Ratio (expressed as a percentage) of a power generating unit's actual annual electric output (expressed in MWe-hr) divided by the unit's nameplate capacity multiplied by eight thousand seven hundred sixty (8,760) hours.

4. Capture device—A hood, enclosed room, floor sweep, or other means of collecting solvent emissions or other pollutants into a duct so that the pollutant can be directed to a pollution control device such as an incinerator or carbon adsorber.

5. Capture efficiency—The fraction of all organic vapors generated by a process that is directed to a control device.

6. CARB—California Air Resources Board, 2020 L Street, PO Box 2815, Sacramento, CA 95812.

[1./7. Carbon adsorption system—A device containing adsorbent material (for example, activated carbon, aluminum, silica gel); an inlet and outlet for exhaust gases; and a system to regenerate the saturated adsorbent. The carbon adsorption system must provide for the proper disposal or reuse of all volatile organic compounds (VOC) adsorbed.

8. Cargo tank—A delivery tank truck or railcar which is loading gasoline or which has loaded gasoline on the immediately-previous load.

[2./9. Catalytic incinerator—A control device using a catalyst to allow combustion to occur at a lower temperature.

[3./10. Category I nonfriable ACM—Asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than one percent (1%) asbestos as determined using the method specified in 40 CFR [part] 763, subpart E, Appendix E, section 1, Polarized Light Microscopy.

[4./11. Category II nonfriable ACM—Any material, excluding category I nonfriable ACM, containing more than one percent (1%) asbestos as determined using the method specified in 40 CFR [part] 763, subpart E, Appendix E, section 1, Polarized Light Microscopy that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

12. Cause or contribute to a new violation—A federal action that—

A. Causes a new violation of a national ambient air quality standard (NAAQS) at a location in a nonattainment or maintenance area which would otherwise not be in violation of the standard during the future period in question if the federal action were not taken; or

B. Contributes, in conjunction with other reasonably foreseeable actions, to a new violation of a NAAQS at a location in a nonattainment or maintenance area in a manner that would increase the frequency or severity of the new violation.

13. Caused by, as used in the terms “direct emissions” and “indirect emissions”—Emissions that would not otherwise occur in the absence of the federal action.

14. Ceramic tile installation adhesive—An adhesive intended by the manufacturer for use in the installation of ceramic tiles.

15. Certified product data sheet—Documentation furnished by a coating supplier or an outside laboratory that provides the VOC content by percent weight, the solids content by percent weight, and density of a finishing material, strippable booth coating, or solvent, measured using the EPA Method 24, or an equivalent or alternative method (or formulation data, if approved by the director). The purpose of the certified product data sheet is to assist the affected source in demonstrating compliance with the emission limitations. Therefore, the VOC content should represent the maximum VOC emission potential of the finishing material, strippable booth coating, or solvent.

16. Charcoal kiln—Any closed structure used to produce charcoal by controlled burning (pyrolysis) of wood. Retorts and furnaces used for charcoal production are not charcoal kilns.

17. Charcoal kiln control system—A combination of an emission control device and connected charcoal kiln(s).

18. Chemical milling maskant—A coating that is applied directly to aluminum components to protect surface areas when chemical milling the component with a Type I or Type II etchant. Type I chemical milling maskants are used with a Type I etchant, and Type II chemical milling maskants are used with a Type II etchant. This definition does not include bonding maskants, critical use and line sealer maskants, and seal coat maskants. Maskants that must be used with a combination of Type I or Type II etchants and any of the above types of maskants are also not included in this definition.

19. Chemotherapeutic waste—Waste material resulting from the production or use of antineoplastic agents used for the purpose of stopping or reversing the growth of malignant cells.

[5./20. Circumvention—Building, erecting, installing, or using any article, machine, equipment, process, or method which, when used, would conceal an emission that would otherwise constitute a violation of an applicable standard or requirement. That concealment includes, but is not limited to, the use of gaseous adjuncts to achieve compliance with a visible emissions standard, and the piecemeal carrying out of an operation to avoid coverage by a standard that applies only to operations larger than a specific size.

21. Class I hardboard—A hardboard panel that meets the specifications of Voluntary Product Standard PS 59-73 as approved by the American National Standards Institute.

22. Class II finish—A finish applied to hardboard panels that meets the specifications of Voluntary Product Standard PS 59-73 as approved by the American National Standards Institute.

[6./23. Clean room—An uncontaminated area or room which is a part of the worker decontamination enclosure system.

24. Clean scanning—The illegal act of connecting the On-Board Diagnostics (OBD) cable or wireless transmitter to the data link connector of a vehicle other than the vehicle photographed and identified on the emissions VIR for the purpose of bypassing the required OBD test procedure.

25. Cleaning operations—processes of cleaning products, product components, tools, equipment, or general work areas during production, repair, maintenance or servicing, including, but not limited to, spray gun cleaning, spray booth cleaning, large and small manufactured component cleaning, parts cleaning, equipment cleaning, line cleaning, floor cleaning, and tank cleaning, at sources with emission units.

26. Cleaning solution—A liquid solvent used to remove printing ink and debris from the surfaces of the printing press and its parts. Cleaning solutions include, but are not limited to, blanket wash, roller wash, metering roller cleaner, plate cleaner, impression cylinder washes, and rubber rejuvenators.

[7./27. Clear coat—A coating which lacks color and opacity or is transparent and uses the undercoat as a reflectant base or undertone color. This term also includes corrosion preventative coatings used for the interior of drums or pails.

28. Clear wood finishes—Clear and semi-transparent topcoats applied to wood substrates to provide a transparent or translucent film.

29. Clinker—The product of a Portland cement kiln from which finished cement is manufactured by milling and grinding.

[8./30. Closed container—A container with a cover fastened in place so that it will not allow leakage or spilling of the contents.

31. Closed landfill—A landfill in which solid waste is no longer being placed and in which no additional wastes will be placed without first filing a notification of modification as prescribed under 40 CFR 60.7(a)(4). Once a notification of modification has been filed, and additional solid waste is placed in the landfill, the landfill is no longer closed.

32. Closure—That point in time when a landfill becomes a closed landfill.

33. Coating—A protective, decorative, or functional material applied in a thin layer to a surface. Such materials include, but are not limited to, paints, topcoats, varnishes, sealers, stains, washcoats, basecoats, inks, and temporary protective coatings. For the purposes of 10 CSR 10-5.330, coating does not include ink used in printing operations regulated under 10 CSR 10-5.340 and 10 CSR 10-5.442.

[9./34. Coating applicator—An apparatus used to apply a surface coating.

[10./35. Coating line—One (1) or more apparatus or operations which include a coating applicator, flash-off area, and oven where a surface coating is applied, dried, or cured, or a combination of these.

36. Coating solids (or “solids”)—The part of the coating that remains after the coating is dried or cured; solids content is determined using data from EPA Method 24, or an alternative or equivalent method.

37. Co-fired combustor—A unit combusting hospital waste and/or medical/infectious waste with other fuels or wastes and subject to an enforceable requirement limiting the unit to combusting a fuel feed stream, ten percent (10%) or less of the weight of which is comprised, in aggregate, of hospital waste and medical/infectious waste as measured on a calendar-quarter basis. For purposes of this definition, pathological waste, chemotherapeutic waste, and low-level radioactive waste are considered “other wastes” when calculating the percentage of hospital waste and medical/infectious waste combusted.

38. Cogenerator—For the purposes of paragraph (1)(A)3. of 10 CSR 10-6.364 only, cogenerator is a facility which—

A. For a unit that commenced construction on or prior to November 15, 1990, was constructed for the purpose of supplying equal to or less than one-third (1/3) its potential electrical output capacity or equal to or less than two hundred nineteen thousand (219,000) MWe-hrs actual electric output on an annual basis to any utility power distribution system for sale (on a gross basis). If the purpose of construction is not known, the administrator will presume that actual operation from 1985 through 1987 is consistent with such purpose. However, if in any three (3)-calendar-year period after November 15, 1990, such unit sells to a utility power distribution system an annual average of more than one-third (1/3) of its potential electrical output capacity and more than two hundred nineteen thousand (219,000) MWe-hrs actual electric output (on a gross basis), that unit shall be an affected unit, subject to the requirements of the acid rain program; or

B. For units which commenced construction after November 15, 1990, supplies equal to or less than one-third (1/3) its potential electrical output capacity or equal to or less than two hundred nineteen thousand (219,000) MWe-hrs actual electric output on an annual basis to any utility power distribution system for sale (on a gross basis). However, if in any three (3)-calendar-year period after November 15, 1990, such unit sells to a utility power distribution system an annual average of more than one-third (1/3) of its potential electrical output capacity and more than two hundred nineteen thousand (219,000) MWe-hrs actual electric output (on a gross basis), that unit shall be an affected unit, subject to the requirements of the acid rain program.

[11.]39. Cold cleaner—Any device or piece of equipment that contains and/or uses liquid solvent, into which parts are placed to remove soils from the surfaces of the parts or to dry the parts. Cleaning machines that contain and use heated nonboiling solvent to clean the parts are classified as cold cleaning machines.

40. Cold rolling mill—Batch process aluminum sheet rolling mill with a preset gap between the work rolls used to reduce the sheet thickness. The process generally occurs at temperatures below two hundred sixty-five degrees Fahrenheit (265 °F). A cold rolling mill is used mainly for the production of aluminum sheet at gauges between three-tenths of one inch to two-thousandths of one inch (0.3"-0.002"). Reductions to finish gauge may occur in one (1) pass or several passes.

41. Combined cycle system—A system comprised of one (1) or more combustion turbines, heat recovery steam generators, and steam turbines configured to improve overall efficiency of electricity generation or steam production.

42. Combustion turbine—An enclosed fossil or other fuel-fired device that is comprised of a compressor, a combustor, and a turbine and in which the flue gas resulting from the combustion of fuel in the combustor passes through the turbine, rotating the turbine.

[12.]43. Commenced—An owner or operator has undertaken a continuous program of construction or modification *[or that an owner or operator]*, has entered into a binding agreement, or has contractual obligation to undertake and complete within a reasonable time[,] a continuous program of construction or modification.

44. Commenced commercial operation—With regard to a unit that serves a generator, to have begun to produce steam, gas, or other heated medium used to generate electricity for sale or use, including test generation. For the purpose of 10 CSR 10-6.360 only, the date of commencement of commercial operation shall be as follows:

A. Except as provided in subsection (1)(E) of 10 CSR 10-6.360, for a unit that is a NO_x budget unit under section (1) of 10 CSR 10-6.360 on the date the unit commences commercial operation, such date shall remain the unit's date of commencement of

commercial operation even if the unit is subsequently modified, reconstructed, or repowered; and

B. Except as provided in subsections (1)(E) or (3)(H) of 10 CSR 10-6.360, for a unit that is not a NO_x budget unit under section (1) of 10 CSR 10-6.360 on the date the unit commences commercial operation, the date the unit becomes a NO_x budget unit under section (1) of 10 CSR 10-6.360 shall be the unit's date of commencement of commercial operation.

[13.]45. Commenced operation—The initial setting into operation of any air pollution control equipment or process equipment. For the purpose of 10 CSR 10-6.360 only, commenced operation is to have begun any mechanical, chemical, or electronic process, including, with regard to a unit, start-up of a unit's combustion chamber and the date of commencement of operation shall be as follows:

A. Except as provided in subsection (1)(E) of 10 CSR 10-6.360, for a unit that is a NO_x budget unit under section (1) of 10 CSR 10-6.360 on the date of commencement of operation, such date shall remain the unit's date of commencement of operation even if the unit is subsequently modified, reconstructed, or repowered; and

B. Except as provided in subsection (1)(E) of 10 CSR 10-6.360 or subsection (3)(H) of 10 CSR 10-6.360, for a unit that is not a NO_x budget unit under section (1) of 10 CSR 10-6.360 on the date of commencement of operation, the date the unit becomes a NO_x budget unit under section (1) of 10 CSR 10-6.360 shall be the unit's date of commencement of operation.

46. Commercial HMIWI—An HMIWI which offers incineration services for hospital/medical/infectious waste generated off-site by firms unrelated to the firm that owns the HMIWI.

47. Commercial solid waste—All types of solid waste generated by stores, offices, restaurants, warehouses, and other non-manufacturing activities, excluding residential and industrial wastes.

[14.]48. Commercial vehicle—*[A motor vehicle designed or regularly used for carrying freight and merchandise or more than eight (8) passengers]* Any motor vehicle, other than a passenger vehicle, and any trailer, semitrailer, or pole trailer drawn by such motor vehicle, that is designed, used, and maintained for the transportation of persons or property for hire, compensation, profit, or in the furtherance of a commercial enterprise.

49. Commercial/Institutional boiler—A boiler used in commercial establishments or institutional establishments such as medical centers, institutions of higher education, hotels, and laundries to provide electricity, steam, and/or hot water.

[15.]50. Commission—The Missouri Air Conservation Commission established pursuant to section 643.040, RSMo.

51. Common stack—A single flue through which emissions from two (2) or more NO_x units are exhausted.

52. Compliance account—A NO_x allowance tracking system account, established for an affected unit, in which the NO_x allowance allocations for the unit are initially recorded and in which are held NO_x allowances available for use by the unit for a control period for the purpose of meeting the unit's NO_x emission limitation.

53. Compliance certification—A submission to the director or the administrator, that is required to report a NO_x budget source's or a NO_x budget unit's compliance or noncompliance with stated requirements and that is signed by the NO_x authorized account representative in accordance with 10 CSR 10-6.360.

54. Compliance cycle—The two (2)-year duration during which a subject vehicle in the enhanced emissions inspection program area is required to comply with sections 643.300–643.355, RSMo.

A. For private-entity vehicles, the compliance cycle begins sixty (60) days prior to the subject vehicle's registration and biennial license plate tab expiration.

B. For public-entity vehicles, the compliance cycle begins on January 1 of each even-numbered calendar year. The compliance cycle ends on December 31 of each odd-numbered calendar year.

55. Compliant coating—A finishing material or strippable booth coating that meets the emission limits as specified.

[16.]/**56. Condensate (hydrocarbons)**—A hydrocarbon liquid separated from natural gas which condenses due to changes in the temperature or pressure, or both, and remains liquid at standard conditions.

[17.]/**57. Condenser**—Any heat transfer device used to liquefy vapors by removing their latent heats of vaporization including, but not limited to, shell and tube, coil, surface, or contact condensers.

58. Conference, conciliation, and persuasion—A process of verbal or written communications, including but not limited to meetings, reports, correspondence, or telephone conferences between authorized representatives of the department and the alleged violator. The process shall, at minimum, consist of one (1) offer to meet with the alleged violator tendered by the department. During any such meeting, the department and the alleged violator shall negotiate in good faith to eliminate the alleged violation and shall attempt to agree upon a plan to achieve compliance.

59. Confidential business information—Secret processes, secret methods of manufacture or production, trade secrets, and other information possessed by a business that, under existing legal concepts, the business has a right to preserve as confidential, and to limit its use by not disclosing it to others in order that the business may obtain or retain business advantages it derives from its rights in the information. For the purpose of 10 CSR 10-6.300, confidential business information (CBI) is information that has been determined by a federal agency, in accordance with its applicable regulations, to be a trade secret, or commercial or financial information obtained from a person and privileged or confidential and is exempt from required disclosure under the Freedom of Information Act (5 U.S.C. 552(b)(4)).

60. Conformity determination—The evaluation (made after an applicability analysis is completed) that a federal action conforms to the applicable implementation plan and meets the requirements of rule 10 CSR 10-6.300.

61. Conformity evaluation—The entire process from the applicability analysis through the conformity determination that is used to demonstrate that the federal action conforms to the requirements of rule 10 CSR 10-6.300.

[18.]/**62. Conservation vent**—Any valve designed and used to reduce evaporation losses of VOC by limiting the amount of air admitted to, or vapors released from, the vapor space of a closed storage vessel.

63. Consolidated Emissions Reporting Rule (CERR)—A U.S. Environmental Protection Agency (EPA) rule designed to simplify federal reporting and unify state and local agency reporting dates.

[19.]/**64. Construction**—Fabricating, erecting, reconstructing, or installing a source operation. Construction shall include installation of building supports and foundations, laying of underground pipe work, building of permanent storage structures, and other construction activities related to the source operation.

65. Contact adhesive—An adhesive that—

A. Is designed for application to both surfaces to be bonded together;

B. Is allowed to dry before the two (2) surfaces are placed in contact with each other;

C. Forms an immediate bond that is impossible, or difficult, to reposition after both adhesive-coated surfaces are placed in contact with each other; and

D. Does not need sustained pressure or clamping of surfaces after the adhesive-coated surfaces have been brought together using sufficient momentary pressure to establish full contact between both surfaces.

Contact adhesive does not include rubber cements that are primarily intended for use on paper substrates. Contact adhesive also does not include vulcanizing fluids that are designed and labeled for tire repair only.

[20.]/**66. Containment**—The area where an asbestos abatement project is conducted. The area must be enclosed either by a glove bag or plastic sheeting barriers.

67. Continuing program responsibility—A federal agency has responsibility for emissions caused by actions it takes itself or actions of non-federal entities that the federal agency, in exercising its normal programs and authorities, approves, funds, licenses, or permits, provided the agency can impose conditions on any portion of the action that could affect the emissions.

68. Continuous coater—A finishing system that continuously applies finishing materials onto furniture parts moving along a conveyor system. Finishing materials that are not transferred to the part are recycled to the finishing material reservoir. Several types of application methods can be used with a continuous coater including spraying, curtain coating, roll coating, dip coating, and flow coating.

69. Continuous emissions monitoring system (CEMS)—Monitoring system for continuously measuring and recording the emissions of a pollutant from an affected facility. For the purposes of 10 CSR 10-6.350 and 10 CSR 10-6.360, CEMS means the equipment required to sample, analyze, measure, and provide, by readings taken at least once every fifteen (15) minutes of the measured parameters, a permanent record of nitrogen oxides emissions, expressed in tons per hour for nitrogen oxides. The following systems are component parts included, consistent with 40 CFR 75, in a continuous emissions monitoring system:

A. Flow monitor;

B. Nitrogen oxides pollutant concentration monitors;

C. Diluent gas monitor (oxygen or carbon dioxide) when such monitoring is required;

D. A continuous moisture monitor when such monitoring is required; and

E. An automated data acquisition and handling system.

70. Continuous HMIWI—An HMIWI that is designed to allow waste charging and ash removal during combustion.

71. Continuous Opacity Monitoring System (COMS)—All equipment required to continuously measure and record the opacity of emissions within a stack or duct. COMS consists of sample interface, analyzer, and data recorder components and usually includes, at a minimum, transmissometers, transmissometer control equipment, and data transmission, acquisition, and recording equipment.

72. Continuous program to implement—The federal agency has started the action identified in the plan and does not stop the actions for more than an eighteen (18)-month period, unless it can demonstrate that such a stoppage was included in the original plan.

73. Continuous recorder—A data recording device recording an instantaneous data value at least once every fifteen (15) minutes.

74. Contractor—The state contracted company who shall implement the decentralized motor vehicle emissions inspection program as specified in sections 643.300–643.355, RSMo, and the state contracted company who shall implement the acceptance test procedure.

75. Control device—Any equipment that reduces the quantity of a pollutant that is emitted to the air. The device may destroy or secure the pollutant for subsequent recovery. Includes, but is not limited to, incinerators, carbon adsorbers, and condensers.

76. Control device efficiency—The ratio of the pollution released by a control device and the pollution introduced to the control device, expressed as a fraction.

77. Control period—The period beginning May 1 of a calendar year and ending on September 30 of the same calendar year.

78. Control system—The combination of capture and control devices used to reduce emissions to the atmosphere.

79. Controlled landfill—Any landfill at which collection and control systems are required under this rule as a result of the nonmethane organic compounds emission rate. The landfill is considered controlled if a collection and control system design plan is submitted in compliance with the applicable rule.

80. Conventional air spray—A spray coating method in which the coating is atomized by mixing it with compressed air at an air pressure greater than ten (10) pounds per square inch (gauge) at the point of atomization. Airless and air-assisted airless spray technologies are not conventional air spray because the coating is not atomized by mixing it with compressed air. Electrostatic spray technology is also not considered conventional air spray because an electrostatic charge is employed to attract the coating to the workpiece.

[21./81. Conveyorized degreaser—A type of degreaser in which the parts are loaded continuously.

82. Cove base—A flooring trim unit, generally made of vinyl or rubber, having a concave radius on one (1) edge and a convex radius on the opposite edge that is used in forming a junction between the bottom wall course and the floor or to form an inside corner.

83. Cove base installation adhesive—An adhesive intended by the manufacturer to be used for the installation of cove base or wall base on a wall or vertical surface at floor level.

[22./84. Criteria pollutant or standard—*[Air]* Any pollutants for which there is established a NAAQS at 40 CFR 50 and air quality standards have been established in 10 CSR 10-6.010.

[23./85. Crude oil—A naturally-occurring mixture which consists of hydrocarbons and sulfur, nitrogen, or oxygen derivatives, or a combination of these, of hydrocarbons which is a liquid at standard conditions.

[24./86. Custody transfer—The transfer of produced crude oil or condensate, or both, after processing or treating, or both, in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.

[25./87. Cutback asphalt—Any asphaltic cement that has been liquefied by blending with VOC liquid diluents.

88. Cyanoacrylate adhesive—An adhesive with a cyanoacrylate content of at least ninety-five percent (95%) by weight.

89. Cyclone boiler—A boiler with a horizontal, cylindrical furnace that burns crushed, rather than pulverized, coal.

90. Cyclone EGU—An electric generating unit (EGU) with a fossil-fuel-fired boiler consisting of one (1) or more horizontal cylindrical barrels that utilize tangentially applied air to produce a swirling combustion pattern of coal and air.

(D) All terms beginning with "D."

1. Data Link Connector (DLC)—The terminal required to be installed on all On-Board Diagnostics (OBD) equipped vehicles that allows communication with a vehicle's OBD system.

2. Day—A period of twenty-four (24) consecutive hours beginning at midnight local time, or beginning at a time consistent with a facility's operating schedule.

[1./3. Degreasing—A solvent metal cleaning in which non-aqueous solvents are used to clean and remove soils from metal surfaces.

[2./4. Delivery vessel—A tank truck, trailer, or railroad tank car.

[3./5. De minimis levels—Any emissions level less than or equal to the rates listed in Table 1, subsection (3)(A) of this rule.

[4./6. Demolition project—The wrecking, razing, burning, or removing of any load-supporting structural member or portion of a

structure together with any related handling operation.

7. Department—The Missouri Department of Natural Resources, which includes the director thereof, or the person or division or program within the department delegated the authority to render the decision, order, determination, finding, or other action that is subject to review by the commission. PO Box 176, Jefferson City, MO 65102.

[5./8. Department-approved inhouse project—An asbestos abatement project in a person's own facility using their own trained facility employees; the project has received departmental approval as part of planned renovation operations.

9. Design capacity—The maximum amount of solid waste the landfill can accept, as indicated in terms of volume or mass in the most recent operating or construction permit issued by the county or state agency responsible for regulating the landfill, plus any in-place waste not accounted for in the most recent permit. If the owner or operator chooses to convert the design capacity from volume to mass or from mass to volume to demonstrate its design capacity is less than two and one-half (2.5) million megagrams or two and one-half (2.5) million cubic meters, the calculation must include a site-specific density, which must be recalculated annually.

[6./10. Designated representative—A responsible individual authorized by the owner or operator of an affected source and of all affected units at the source, as evidenced by a certificate of representation submitted in accordance with *[subpart B of]* 40 CFR *[part]* 72, **subpart B** to represent and legally bind each owner and operator, as a matter of federal law, in matters pertaining to the *[Acid Rain Program]* acid rain program. Whenever the term "responsible official" is used in 40 CFR *[part]* 70, 10 CSR 10-6.065, or in any other regulations implementing Title V of the Act, it shall be deemed to refer to the "designated representative" with regard to all matters under the *[Acid Rain Program]* acid rain program.

11. Diagnostic Trouble Code (DTC)—An alphanumeric code consisting of five (5) characters which is stored by a vehicle's On-Board Diagnostics system if a vehicle malfunctions or deteriorates in such a way as to potentially raise the vehicle's tailpipe or evaporative emissions more than one and one-half (1.5) times the federal test procedure certification limits. The code indicates the system or component that is in need of diagnosis and repair to prevent the vehicle's emissions from increasing further.

[7./12. Diammonium phosphate—A product resulting from the reaction between phosphoric acid and ammonia having the molecular formula $(\text{NH}_4)_2\text{HPO}_4$.

13. Diesel engine—A compression-ignited (CI) two (2)- or four (4)-stroke engine in which liquid fuel is injected into the combustion chamber and ignited when the air charge has been compressed to a temperature sufficiently high for auto-ignition.

14. Digital printing—A print-on-demand method of printing in which an electronic output device transfers variable data, in the form of an image, from a computer to a variety of substrates. Digital printing methods include, but are not limited to, inkjet printing, electrophotographic printing, dye sublimation printing, thermal wax printing, and solid ink printing.

15. Dioxins/furans—The combined emission of tetra-through octa-chlorinated dibenzo-para-dioxins and dibenzofurans as measured by the U.S. Environmental Protection Agency (EPA) Reference Method 23 of 40 CFR 60, Appendix A-7.

16. Direct emissions—Those emissions of a criteria pollutant or its precursors that are caused or initiated by the federal action and originate in a nonattainment or maintenance area and occur at the same time and place as the action and are reasonably foreseeable.

[8./17. Director or department director—Director of the Missouri Department of Natural Resources, or a designated representative, to carry out the duties as described in section 643.060, RSMo.

[9./18. Dispersion technique—

A. A dispersion technique is any technique designed to affect the concentration of a pollutant in the ambient air by—

(I) Using that portion of a stack which exceeds good engineering practice stack height;

(II) Varying the rate of emission of a pollutant according to atmospheric conditions or ambient concentrations of that pollutant; or

(III) Increasing final exhaust gas plume rise by manipulating source process parameters, exhaust gas parameters, stack parameters, or combining exhaust gases from several existing stacks into one (1) stack; or other selective handling of exhaust gas streams so as to increase the exhaust gas plume rise; and

B. This definition does not include:

(I) The reheating of a gas stream, following use of a pollution control system, for the purpose of returning the gas to the temperature at which it was originally discharged from the installation generating the gas stream;

(II) The merging of exhaust gas streams where—

(a) The installation owner or operator demonstrates that the installation was originally designed and constructed with the merged gas streams;

(b) After July 8, 1985, the merging is part of a change in operation at the installation that includes the installation of emissions control equipment and is accompanied by a net reduction in the allowable emissions of a pollutant. This exclusion from the definition of dispersion technique shall apply only to the emission limitation for the pollutant affected by a change in operation; or

(c) Before July 8, 1985, the merging was part of a change in operation at the installation that included the installation of emissions control equipment or was carried out for sound economic or engineering reasons. Where there was an increase in the emission limitation or in the event that no emission limitation was in existence prior to the merging, the director shall presume that merging was significantly motivated by an intent to gain emissions credit for greater dispersion. Without a demonstration by the source owner or operator that merging was not significantly motivated by that intent, the director shall deny credit for the effects of merging in calculating the allowable emissions for the source;

(III) Smoke management in agricultural or silvicultural prescribed burning programs;

(IV) Episodic restrictions on residential woodburning and open burning; or

(V) Techniques under part (2)(D)10.A.(III) of this definition which increase final exhaust gas plume rise where the resulting allowable emissions of sulfur dioxide from the installation do not exceed five thousand (5,000) tons per year.

19. Disposal facility—All contiguous land and structures, other appurtenances, and improvements on the land used for the disposal of solid waste.

20. Disposed off-site—Sending used organic solvents or coatings outside of the facility boundaries for disposal.

21. Distillation operation—An operation separating one (1) or more feed stream(s) into two (2) or more exit stream(s), each exit stream having component concentration different from those in the feed stream(s). The separation is achieved by the redistribution of the components between the liquid- and vapor-phase as they approach equilibrium within the distillation unit.

22. Distillation unit—A device or vessel in which distillation operations occur, including all associated internals (such as trays or packing) and accessories (such as reboiler, condenser, vacuum pump, steam jet, etc.), plus any associated recovery system.

[10.]23. Draft permit—The version of a permit for which the permitting authority offers public participation or affected state review.

[11.]24. Drum—Any cylindrical container of thirteen to one hundred ten (13–110)-gallon capacity.

[12.]25. Dry cleaning installation—An installation engaged in the cleaning of fabrics in an essentially nonaqueous solvent by means

of one (1) or more washes in solvent, extraction of excess solvent by spinning and drying by tumbling in an airstream. The installation includes, but is not limited to, any washer, dryer, filter and purification systems, waste disposal systems, holding tanks, pumps, and attendant piping and valves.

26. Dry scrubber—An add-on air pollution control system that injects dry alkaline sorbent (dry injection) or sprays an alkaline sorbent (spray dryer) to react with and neutralize acid gases in the exhaust stream forming a dry powder material.

27. Dual fuel engine—Compression ignited stationary internal combustion engine that is capable of burning liquid fuel and gaseous fuel simultaneously.

(E) All terms beginning with “E.”

1. Early reduction credit (ERC)—NO_x emission reductions in the years 2000, 2001, 2002, and 2003 that are below the limits specified in subsection (3)(A) of 10 CSR 10-6.350; ERCs will only be available for use during the years of 2004 and 2005. When calculating ERCs or performing calculations involving ERCs, ERCs shall always be rounded down to the nearest ton.

2. Economic benefit—Any monetary gain which accrues to a violator as a result of noncompliance.

3. E85—Ethanol-gasoline blend containing eighty-five percent (85%) denatured ethanol and fifteen percent (15%) gasoline that also meets the standard specification requirements of the most recent update to ASTM D 5798.

4. Electric dissipating coating—A coating that rapidly dissipates a high-voltage electric charge.

5. Electric generating unit (EGU)—Any fossil-fuel-fired boiler or turbine that serves an electrical generator with the potential to use more than fifty percent (50%) of the usable energy from the boiler or turbine to generate electricity.

6. Electric-insulating and thermal conducting coating—A coating that displays an electrical insulation of at least one thousand (1,000) volts DC per mil on a flat test plate and an average thermal conductivity of at least twenty-seven hundredths British thermal units (0.27 Btu) per hour-foot-degree-Fahrenheit.

7. Electric-insulating varnish—A non-convertible-type coating applied to electric motors, components of electric motors, or power transformers, to provide electrical, mechanical, and environmental protection or resistance.

8. Electrodeposition primer (EDP)—A protective, corrosion-resistant waterborne primer on exterior and interior surfaces that provides thorough coverage of recessed areas. It is a dip coating method that uses an electrical field to apply or deposit the conductive coating onto the part. The object being painted acts as an electrode that is oppositely charged from the particles of paint in the dip tank.

9. Electronic component—All portions of an electronic assembly, including, but not limited to, circuit board assemblies, printed wire assemblies, printed circuit boards, soldered joints, ground wires, bus bars, and associated electronic component manufacturing equipment such as screens and filters.

10. Electrostatic preparation coat—A coating that is applied to a plastic part solely to provide conductivity for the subsequent application of a prime, topcoat, or other coating through the use of electrostatic application methods. An electrostatic preparation coat is clearly identified as an electrostatic preparation coat on its material safety data sheet.

11. Emergency—A situation where extremely quick action on the part of the federal agencies involved is needed and where the timing of such federal activities makes it impractical to meet the requirements of 10 CSR 10-6.300, such as natural disasters like hurricanes or earthquakes, civil disturbances such as terrorist acts, and military mobilizations.

[1.]12. Emergency asbestos abatement project—An asbestos abatement project that must be undertaken immediately to prevent imminent severe human exposure or to restore essential facility operation.

13. EMI/RFI shielding—A coating used on electrical or electronic equipment to provide shielding against electromagnetic interference (EMI), radio frequency interference (RFI), or static discharge.

[2./14. **Emission**—The release or discharge, whether directly or indirectly, into the atmosphere of one (1) or more air contaminants.

15. Emission data—

A. The identity, amount, frequency, concentration, or other characteristics (related to air quality) of any air contaminant which—

(I) Has been emitted from an emission unit;

(II) Results from any emission by the emissions unit;

(III) Under an applicable standard or limitation, the emissions unit was authorized to emit; or

(IV) Is a combination of any of the parts (2)(E)15.A.(I), (II), or (III) of this rule;

B. The name, address (or description of the location), and the nature of the emissions unit necessary to identify the emission units including, a description of the device, equipment, or operation constituting the emissions unit; and

C. The results of any emission testing or monitoring required to be reported under any rules of the commission.

16. Emission events—Discrete venting episodes that may be associated with a single unit of operation.

17. Emission Inventory—A listing of information on the location, type of source, type and quantity of pollutant emitted, as well as other parameters of the emissions;

[3./18. **Emission limitation**—A regulatory requirement, permit condition, or consent agreement which limits the quantity, rate, or concentration of emissions on a continuous basis, including any requirement which limits the level of opacity, prescribes equipment, sets fuel specifications, or prescribes operation or maintenance procedures for an installation to assure continuous emission reduction.

19. Emission offsets—Emissions reductions which are quantifiable, consistent with the applicable implementation plan attainment and reasonable further progress demonstrations, surplus to reductions required by, and credited to, other applicable implementation plan provisions, enforceable under both state and federal law, and permanent within the time frame specified by the program. Emissions reductions intended to be achieved as emissions offsets must be monitored and enforced in a manner equivalent to that under EPA's new source review requirements.

20. Emission rate cutoff—The threshold annual emission rate to which a landfill compares its estimated emission rate to determine if control under the applicable regulation is required.

21. Emission reduction credit (ERC)—A certified emission reduction that is created by eliminating future emissions and expressed in tons per year. One (1) ERC is equal to one (1) ton per year. An ERC must be real, properly quantified, permanent, and surplus.

22. Emissions—Air pollutants exhausted from a unit or source into the atmosphere, as measured, recorded, and reported to the administrator by the NO_x authorized account representative and as determined by the administrator.

23. Emissions budgets—Those portions of the total allowable emissions defined in an EPA-approved revision to the applicable implementation plan for a certain date for the purpose of meeting reasonable further progress milestones or attainment or maintenance demonstrations, for any criteria pollutant or its precursors, specifically allocated by the applicable implementation plan to mobile sources, to any stationary source or class of stationary sources, to any federal action or class of action, to any class of area sources, or to any subcategory of the emissions inventory. The allocation system must be specific enough to assure meeting the criteria of section 176(c)(1)(B) of the CAA. An emissions budget may be expressed in terms of an annual period,

a daily period, or other period established in the applicable implementation plan.

24. Emissions inspection—Tests performed on a vehicle in order to evaluate whether the vehicle's emissions control components are present and properly functioning.

[4./25. **Emissions unit**—Any part or activity of an installation that emits or has the potential to emit any regulated air pollutant or any pollutant listed under section 112(b) of the Act. This term is not meant to alter or affect the definition of the term unit for the purposes of Title IV of the Act. **For the purpose of 10 CSR 10-6.410 only, emissions unit is any part of a source or activity at a source that emits or would have the potential to emit criteria pollutants or their precursors.**

[5./26. **Emulsified asphalt**—An emulsion of asphalt cement and water that contains a small amount of an emulsifying agent, as specified in ASTM D (977-77) or ASTM D (2397-73).

[6./27. **Enamel**—A surface coating that is a mixture of paint and varnish, having vehicles similar to those used for varnish, but also containing pigments.

28. Enclosed combustor—An enclosed firebox which maintains a relatively-constant limited peak temperature generally using a limited supply of combustion air. An enclosed flare is considered an enclosed combustor.

29. End exterior coating—A coating applied to the exterior end of a can to provide protection to the metal.

[7./30. **End seal compound**—The gasket forming coating used to attach the end pieces of a can during manufacturing or after filling with contents.

31. Energized electrical system—Any alternating current (AC) or direct current (DC) electrical circuit on an assembled aircraft once electrical power is connected, including interior passenger and cargo areas, wheel wells, and tail sections.

32. Energy Information Administration—The Energy Information Administration of the United States Department of Energy.

33. Engine rating—The output of an engine as determined by the engine manufacturer and listed on the nameplate of the unit, regardless of any derating.

[8./34. **Equipment**—Any item that is designed or intended to perform any operation and includes any item attached to it to assist in the operation.

35. EPA—The U.S. Environmental Protection Agency.

36. EPDM roof membrane—A prefabricated single sheet of elastomeric material composed of ethylene propylene diene monomer (EPDM) and that is field-applied to a building roof using one (1) layer or membrane material.

37. Equipment leak—Emissions of volatile organic compounds from pumps, valves, flanges, or other equipment used to transfer or apply finishing materials or organic solvents.

38. Equivalent method—Any method of sampling and analyzing for an air pollutant that has been demonstrated to the director's satisfaction to have a consistent and quantitatively-known relationship to the reference method under specific conditions.

39. Etching filler—A coating for metal that contains less than twenty-three percent (23%) solids by weight and at least one-half percent (0.5%) acid by weight, and is used instead of applying a pretreatment coating followed by a primer.

[9./40. **Excess emissions**—The emissions which exceed the requirements of any applicable emission control regulation.

[10./41. **Excessive concentration**—

A. For installations seeking credit for reduced ambient pollutant concentrations from stack height exceeding that defined in subparagraph [(2)(G)3.B.](2)(G)15.B. of this rule an excessive concentration is a maximum ground level concentration due to emissions from a stack due in whole or part to downwash, wakes, or eddy effects produced by nearby structures or nearby terrain features which are at least forty percent (40%) in excess of the maximum

concentration experienced in the absence of the downwash, wakes, or eddy effects, and that contributes to a total concentration due to emissions from all installations that is greater than an ambient air quality standard. For installations subject to the prevention of significant deterioration program as set forth in 10 CSR 10-6.060(8), an excessive concentration means a maximum ground level concentration due to emissions from a stack due to the same conditions as mentioned previously and is greater than a prevention of significant deterioration increment. The allowable emission rate to be used in making demonstrations under this definition shall be prescribed by the new source performance regulation as referenced by 10 CSR 10-6.070 for the source category unless the owner or operator demonstrates that this emission rate is infeasible. Where demonstrations are approved by the director, an alternative emission rate shall be established in consultation with the source owner or operator;

B. For installations seeking credit after October 11, 1983, for increases in stack heights up to the heights established under subparagraph [(2)(G)3.B.] (2)(G)15.B. of this rule, an excessive concentration is either—

(I) A maximum ground level concentration due in whole or part to downwash, wakes, or eddy effects as provided in subparagraph [(2)(E)10.A.] (2)(E)41.A. of this rule, except that the emission rate used shall be the applicable emission limitation (or, in the absence of this limit, the actual emission rate); or

(II) The actual presence of a local nuisance caused by the stack, as determined by the director; and

C. For installations seeking credit after January 12, 1979, for a stack height determined under subparagraph [(2)(G)3.B.] (2)(G)15.B. of this rule where the director requires the use of a field study of fluid model to verify good engineering practice stack height, for installations seeking stack height credit after November 9, 1984, based on the aerodynamic influence of cooling towers and for installations seeking stack height credit after December 31, 1970, based on the aerodynamic influence of structures not represented adequately by the equations in subparagraph [(2)(G)3.B.] (2)(G)15.B. of this rule, a maximum ground level concentration due in whole or part to downwash, wakes, or eddy effects that is at least forty percent (40%) in excess of the maximum concentration experienced in the absence of downwash, wakes, or eddy effects.

[11.]42. Existing—As applied to any equipment, machine, device, article, contrivance, or installation shall mean in being, installed, or under construction in the Kansas City metropolitan area on September 25, 1968 (Buchanan County, January 21, 1970), in the St. Louis metropolitan area on March 24, 1967 (Franklin County, January 18, 1972), in the Springfield metropolitan area on September 24, 1971, and in the outstate Missouri area on February 24, 1971, except that if equipment, machine, device, article, contrivance, or installation subsequently is altered, repaired, or rebuilt at a cost of fifty percent (50%) or more of its replacement cost exclusive of routine maintenance, it shall no longer be existing[,/] but shall be considered new as defined in this regulation. The cost of installing equipment designed principally for the purpose of air pollution control is not to be considered a cost of altering, repairing, or rebuilding existing equipment for the purpose of this definition. **For the purpose of 10 CSR 10-2.040 and 10 CSR 10-5.030 only, existing is any source which was in being, installed, or under construction on February 15, 1979, except that if any source subsequently is altered, repaired, or rebuilt at a cost of thirty percent (30%) or more of its replacement cost, exclusive of routine maintenance, it shall no longer be existing but shall be considered as new.**

[12.]43. Exterior coating (two (2)-piece)—A surface coating used to coat the outside face of a two (2)-piece can. Used to provide protection from the lithograph or printing operations.

[13.]44. External floating roof—A storage vessel cover in an open top tank consisting of a double-deck or pontoon single deck which rests upon and is supported by petroleum liquid being contained and is equipped with a closure seal(s) to close the space between the roof edge and tank wall.

[14.]45. Extreme environmental conditions—The exposure to any of[—] the weather all of the time, temperatures consistently above ninety-five degrees Celsius (95 °C), detergents-abrasive and scouring agents, solvents, corrosive atmospheres, or similar environmental conditions.

46. Extreme high gloss coating—A coating applied to—

A. Pleasure craft which, when tested by the ASTM Test Method D-523-89, shows a reflectance of ninety percent (90%) or more on a sixty-degree (60°) meter; or

B. Metal and plastic parts that are not components of pleasure craft, which, when tested by the ASTM Test Method D-523 adopted in 1980, shows a reflectance of seventy-five percent (75%) or more on a sixty-degree (60°) meter.

47. Extreme performance coating—A coating used on a metal or plastic surface where the coated surface is, in its intended use, subject to the following:

A. Chronic exposure to corrosive, caustic, or acidic agents, chemicals, chemical fumes, chemical mixtures, or solutions;

B. Repeated exposure to temperatures in excess of two hundred fifty degrees Fahrenheit (250 °F); or

C. Repeated heavy abrasion, including mechanical wear and repeated scrubbing with industrial grade solvents, cleansers, or scouring agents.

(F) All terms beginning with "F."

1. Fabric coating—A coating applied to a textile substrate by dipping or by means of a knife or roll.

2. Fabric filter or baghouse—An add-on air pollution control system that removes particulate matter and nonvaporous metals emissions by passing flue gas through filter bags.

3. Facilities manager—The individual in charge of purchasing, maintaining, and operating the HMIWI or the owner's or operator's representative responsible for the management of the HMIWI. Alternative titles may include director of facilities or vice president of support services.

4. Federal action—Any activity engaged in by a department, agency, or instrumentality of the federal government, or any activity that a department, agency, or instrumentality of the federal government supports in any way, provides financial assistance for, licenses, permits, or approves, other than activities related to transportation plans, programs, and projects developed, funded, or approved under Title 23 U.S.C. or the Federal Transit Act (49 U.S.C. 1601 et seq.). Where the federal action is a permit, license, or other approval for some aspect of a nonfederal undertaking, the relevant activity is the part, portion, or phase of the nonfederal undertaking that requires the federal permit, license, or approval.

5. Federal agency—A federal department, agency, or instrumentality of the federal government.

[1.]6. Federally enforceable—All limitations and conditions which are enforceable by the administrator, including those requirements developed pursuant to 40 CFR [parts] 55, 60, 61, and 63; requirements within any applicable state implementation plan; requirements in operating permits issued pursuant to 40 CFR [parts] 70 or 71, unless specifically designated as non-federally enforceable; and any permit requirements established pursuant to 40 CFR [sections] 52.10, 52.21, or [part] 55, or under regulations approved pursuant to 40 CFR [part] 51, subpart I, including operating permits issued under an EPA-approved program that is incorporated into the state implementation plan and expressly requires adherence to any permit issued under such program.

7. Fill capacity—The maximum amount of wood that can be properly loaded into a charcoal kiln prior to the burn cycle.

[2.]8. Final permit—The version of a part 70 permit issued by the permitting authority that has completed all review procedures as required in [part 70 sections] 40 CFR 70.7 and 70.8.

[3.]9. Final repair—The final coatings applied to correct topcoat imperfections after the complete assembly of the automobile.

10. Finish foil mill—Batch process aluminum foil rolling mill with work rolls in contact to reduce foil gauge. This process reduces intermediate foil and in some cases finished sheet to final gauges. A finish foil mill is used mainly in the production of aluminum foil at gauges between 0.005 inches to 0.00018 inches. Reductions to finish gauge may occur in several passes through the mill.

11. Finish primer/surfacer—A coating applied to pleasure craft with a wet film thickness of less than ten (10) mils prior to the application of a topcoat for purposes of providing corrosion resistance, adhesion of subsequent coatings, a moisture barrier, or promotion of a uniform surface necessary for filling in surface imperfections.

12. Finishing application station—The part of a finishing operation where the finishing material is applied, e.g., a spray booth.

13. Finishing material—A coating used in the wood furniture industry. For the purpose of 10 CSR 10-5.530, such materials include, but are not limited to, basecoats, stains, washcoats, sealers, and topcoats.

14. Finishing operation—Those activities in which a finishing material is applied to a substrate and is subsequently air-dried, cured in an oven, or cured by radiation.

14./15. Firebox—The chamber or compartment of a boiler or furnace in which materials are burned but does not mean the combustion chamber of an incinerator.

16. Flame zone—The portion of the combustion chamber in a boiler occupied by the flame envelope.

17. Flare—An open combustor without enclosure or shroud.

15./18. Flash off area—The space between the application area and the oven.

19. Flexible coating—A coating that is required to comply with engineering specifications for impact resistance, mandrel bend, or elongation as defined by the original equipment manufacturer.

20. Flexible package printing—The application of a coating, or the performance of a graphic arts operation, to flexible packaging. The printing processes used for flexible package printing are rotogravure and flexography. The printing of shrink-wrap labels or wrappers conducted on or in-line with a flexible package printing press is flexible package printing. The printing of self-adhesive labels is not flexible package printing.

21. Flexible packaging—Any package or part of a package the shape of which can be readily changed. Flexible packaging includes, but is not limited to, bags, pouches, liners, and wraps utilizing paper, plastic, film, aluminum foil, metallized or coated paper or film, or any combination of these materials.

22. Flexible vinyl—Non-rigid polyvinyl chloride plastic with at least five percent (5%) by weight plasticizer content.

16./23. Flexographic printing—The application of words, designs, and pictures to a substrate by means of a roll printing technique in which the pattern to be applied is raised above the printing roll and the image carrier is made of rubber or other elastomeric materials.

24. Flow indicator—A device that indicates whether gas flow is present in a vent stream.

25. Flush cleaning—The removal of contaminants such as dirt, grease, and coatings from a vehicle, component, or coating equipment by passing solvent over, into, or through the item being cleaned. The solvent may simply be poured into the item cleaned and then drained, or be assisted by air or hydraulic pressure, or by pumping. The solvent drained from the item may be assisted by air, compressed gas, hydraulic pressure, or pumping. Hand-wipe cleaning operations where wiping, scrubbing, mopping, or other hand actions are used are not included in this definition. Flush cleaning does not include spray gun cleaning.

26. Fog coat—A coating that is applied to a plastic part for the purpose of color matching without masking a molded-in texture.

27. Food service establishment—Any fixed or mobile restaurant; coffee shop; cafeteria; short order cafe; luncheonette; grill; tearoom; sandwich shop; soda fountain; tavern; bar; cocktail lounge; night club; roadside stand; industrial feeding establishment; private, public, or nonprofit organization or institution routinely serving food; catering kitchen, commissary, or similar place in which food or drink is placed for sale or for service on the premises or elsewhere; and any other eating or drinking establishment or operation where food is served or provided for the public with or without charge.

28. Fossil-fuel—Natural gas, petroleum, coal, or any form of solid, liquid, or gaseous fuel derived from such material.

29. Fossil-fuel-fired—With regard to a unit, the combustion of fossil fuel, alone or in combination with any other fuel, where fossil fuel is projected to comprise more than fifty percent (50%) of the annual heat input. For the purpose of 10 CSR 10-6.360 only, fossil-fuel-fired, with regard to a unit, is the combustion of fossil fuel, alone or in combination with any other fuel, where fossil fuel—

A. Actually combusted comprises more than fifty percent (50%) of the annual heat input on a Btu basis during any year starting in 1995 or, if a unit had no heat input starting in 1995, during the last year of operation of the unit prior to 1995; or

B. Is projected to comprise more than fifty percent (50%) of the annual heat input on a Btu basis during any year; provided that the unit shall be “fossil-fuel-fired” as of the date, during such year, on which the unit begins combusting fossil fuel.

30. Fountain solution—The solution which is applied to the image plate to maintain the hydrophilic properties of the nonimage areas. It is primarily water containing an etchant, a gum arabic, and a dampening aid (commonly containing alcohol and alcohol substitutes).

31. Freeboard area—The air space in a batch-load cold cleaner that extends from the liquid surface to the top of the tank.

17./32. Freeboard height—*[The distance from the solvent (cold cleaner) or solvent vapor level (vapor degreaser) to the top edge of the solvent container.]*

A. The distance from the top of the solvent to the top of the tank for batch-loaded cold cleaners;

B. The distance from the air-vapor interface to the top of the tank for open-top vapor degreasers; or

C. The distance from either the air-solvent or air-vapor interface to the top of the tank for conveyorized degreasers.

18./33. Freeboard ratio—The freeboard height divided by the smaller of either the inside length or inside width of the degreaser.

19./34. Friable asbestos-containing material—Any material that contains more than one percent (1%) asbestos, by weight, which is applied to ceilings, walls, structural members, piping, ductwork, or any other part of a building or facility and which, when dry, may be crumbled, pulverized, or reduced to powder by hand pressure.

110./35. Fugitive emissions—Those emissions which according to good engineering practice could not pass through a stack, chimney, vent, or other functionally-equivalent opening.

(G) All terms beginning with “G.”

1. Gas mover equipment—The equipment (i.e., fan, blower, compressor) used to transport landfill gas through the header system.

2. Gas volatile organic compounds (VOC) service—A component that contacts a process fluid containing ten percent (10%) or greater VOC by weight that is in a gaseous state at operating conditions.

11./3. Gasoline—A petroleum liquid having a Reid vapor pressure four pounds (4 lbs/.) per square inch or greater.

4. Gasoline dispensing facility—Any stationary facility which dispenses gasoline into the fuel tank of a motor vehicle.

5. Gasoline distribution facility—Any stationary facility which transfers, loads, and/or unloads gasoline, including but not limited to gasoline bulk terminals, bulk plants, and pipeline facilities, that also does not meet the definition of a gasoline dispensing facility.

6. Gaseous fuel—A combustible gas that includes, but is not limited to, natural gas, landfill gas, coal-derived gas, refinery gas, and biogas. Blast furnace gas is not considered a gaseous fuel under this definition.

7. General account—A NO_x allowance tracking system account that is not a compliance account or an overdraft account.

8. General aviation—Segment of civil aviation that encompasses all facets of aviation except air carriers, commuters, and military. General aviation includes charter and corporate-executive transportation, instruction, rental, aerial application, aerial observation, business, pleasure, and other special uses.

9. General aviation rework facility—Any aerospace installation with the majority of its revenues resulting from the reconstruction, repair, maintenance, repainting, conversion, or alteration of general aviation aerospace vehicles or components.

10. Generating activity—Any process modification that results in a permanent reduction in emissions.

11. Generator—A device that produces electricity.

12. Generator source—Any source that generates an ERC.

13. Gloss reducer—A coating that is applied to a plastic part solely to reduce the shine of the part.

[2.]/14. Glove bag—A manufactured or fabricated device, typically constructed of six (6) mil transparent polyethylene or polyvinyl chloride plastic. This device consists of two (2) inward projecting long sleeves, an internal tool pouch, and an attached, labeled receptacle for asbestos waste. The bags are especially designed to contain sections of pipe for the purpose of removing a short length of damaged asbestos material without releasing fibers into the air.

[3.]/15. Good engineering practice (GEP) stack height—GEP stack height means the greater of—

A. Sixty-five meters (65 m), measured from the ground level elevation at the base of the stack;

B. For stacks on which construction commenced on or before January 12, 1979, and for which the owner or operator had obtained all applicable permits or approvals required under 40 CFR [parts] 51 and 52,

$$Hg = 2.5H$$

provided the owner or operator produces evidence that this equation was actually relied on in establishing an emission limitation; and for all other stacks,

$$Hg = H + 1.5L$$

Where:

Hg = GEP stack height, measured from the ground level elevation at the base of the stack;

H = height of nearby structure(s) measured from the ground level elevation at the base of the stack; and

L = lesser dimension, height, or projected width of the nearby structure(s). Provided that the director may require the use of a field study or fluid model to verify GEP stack height for the installation; or

C. The height demonstrated by a fluid model or field study approved by the director, which ensures that the emissions from a stack do not result in excessive concentrations of any air pollutant as result of atmospheric downwash, wakes, or eddy effects created by the source itself, nearby structures, or nearby terrain features.

16. Gravity-based assessment—The degree of seriousness of a violation taking into consideration the risk to human health

and the environment posed by the violation and considering the extent of deviation from sections 643.010–643.250, RSMo.

17. Greenfield site—A contiguous area under common control that is an undeveloped site.

18. Gross vehicle weight rating (GVWR)—The value specified by the manufacturer as the maximum design loaded weight of a single vehicle.

19. Ground-level ozone—A colorless, odorless gas formed by the mixing of volatile organic compounds and oxides of nitrogen from stationary and mobile pollution sources in the presence of heat and sunlight. Ground-level ozone is a strong oxidizer that negatively affects human health by causing diminished lung function in both healthy individuals and those with pre-existing respiratory problems.

[4.]/20. Growth increment—The limit on new installation or major modification emissions of a nonattainment pollutant. Growth increment is reserved for use only by installations with no applicable, internally-generated, banked emissions reductions.

(H) All terms beginning with “H.”

1. Halogenated vent stream—Any vent stream determined to have a total concentration of halogen atoms (by volume) contained in organic compounds of two hundred (200) parts per million by volume or greater determined by Method 18 of 40 CFR 60, Appendix A, or other test or data validated by Method 301 of 40 CFR 63, Appendix A, or by engineering assessment or process knowledge that no halogenated organic compounds are present. For example, one hundred fifty (150) parts per million by volume of ethylene dichloride would contain three hundred (300) parts per million by volume of total halogen atoms.

2. Hand cleaning/wiping operation—The removal of contaminants, such as dirt, grease, oil, and coatings, from a surface by physically rubbing it with a material such as a rag, paper, or cotton swab that has been moistened with a cleaning solvent.

3. Hand-fired fuel-burning equipment—Any stove, furnace, or other fuel-burning device in which fuel is manually introduced directly into the combustion chamber.

4. Hardboard—A panel manufactured primarily from inter-felted lignocellulosic fibers that are consolidated under heat and pressure in a hot press.

5. Hardwood particleboard—A manufactured board one-fourth inch (1/4") or less in thickness made of individual wood particles that have been coated with a binder and formed into flat sheets by pressure.

[1.]/6. Hazardous air pollutant—Any of the air pollutants listed in subsection (3)(C) of this rule.

[2. HHV—A higher heating value as determined by 10 CSR 10-6.040(2) (ASTM Standard: D 2015-66, Part 19, 1972, Standard Method for Determining Gross Heating Values of Solid Fuels).]

7. Hearing—Any presentation to, or consideration by the hearing officer of evidence or argument on a petition seeking the commission's review of an action by the department.

8. Hearing officer—A person appointed by the Administrative Hearing Commission.

9. Heat input—The product (in mmBtu/time) of the gross calorific value of the fuel (in Btu/lb) and the fuel feed rate into a combustion device (in mass of fuel/time), as measured, recorded, and reported to the administrator by the NO_x authorized account representative and as determined by the administrator in accordance with the approved process, and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust from other sources.

10. Heat resistant coating—A coating that must withstand a temperature of at least four hundred degrees Fahrenheit (400 °F) during normal use.

11. Heatset—A class of web-offset lithographic and letterpress printing in which the setting of the printing inks requires a heated dryer to evaporate the ink oils. The setting or curing of

inks using only radiation (e.g., infrared, ultraviolet light, or electron beam) is not heatset and is classified as non-heatset.

12. Heavy duty diesel vehicle—A vehicle that—

A. Has a gross vehicle weight rating greater than ten thousand pounds (10,000 lbs);

B. Is powered by a diesel engine; and

C. Is designed primarily for transporting persons or property on a public street or highway.

13. Heavy duty vehicle (HDV)—Any motor vehicle rated at eight thousand five hundred one pounds (8,501 lbs) GVWR or more.

14. High-air phase—The stage of the batch operating cycle when the primary chamber reaches and maintains maximum operating temperatures.

15. High-bake coating—A coating which is designed to cure only at temperatures of more than one hundred ninety-four degrees Fahrenheit (194 °F).

16. High-build primer/surfacer—A coating applied to pleasure craft with a wet film thickness of ten (10) mils or more prior to the application of a topcoat for purposes of providing a moisture barrier, corrosion resistance, adhesion of subsequent coatings, or promoting a uniform surface necessary for filling in surface imperfections.

17. High-gloss coating—A coating applied to pleasure craft which, when tested by the ASTM Test Method D-523-89, shows a reflectance of eighty-five percent (85%) or more on a sixty-degree (60°) meter.

18. High-performance architectural coating—A coating used to protect architectural subsections and which meets the requirements of the Architectural Aluminum Manufacturer Association's publication number AAMA 2604-05, Voluntary Specification, Performance Requirements, and Test Procedures for High Performance Organic Coatings on Aluminum Extrusions and Panels or AAMA 2605-05, Voluntary Specification, Performance Requirements, and Test Procedures for Superior Performing Organic Coatings on Aluminum Extrusions and Panels.

19. High-temperature coating—A coating that is certified to withstand a temperature of one thousand degrees Fahrenheit (1,000 °F) for twenty-four (24) hours.

[3./20. High terrain—Any area having an elevation nine hundred feet (900') or more above the base of the stack of the installation.

21. High-volume low-pressure (HVLP) spray equipment—Spray equipment that is used to apply coating by means of spray gun that operates at ten pounds per square inch gauge (10.0 psig) of atomizing air pressure or less at the air cap.

22. Higher heating value (HHV)—The total heat liberated per mass of fuel burned in British thermal units (Btu) per pound, when fuel and dry air at standard conditions undergo complete combustion and all resultant products are brought to their standard states at standard conditions. It can be determined by 10 CSR 10-6.040(2) (ASTM Standard: D 2015-66, Part 19, 1972, *Standard Method for Determining Gross Heating Values of Solid Fuels*). For the purpose of 10 CSR 10-6.390 only, if certification of the HHV is not provided by the third party fuel supplier, it shall be determined by one (1) of the following test methods: ASTM D2015-85 for solid fuels; ASTM D240-87 or ASTM D2382-88 for liquid hydrocarbon fuels; or ASTM D1826-88 or ASTM D1945-81 in conjunction with ASTM D3588-89 for gaseous fuels.

23. HMIWI operator—Any person who operates, controls, or supervises the day-to-day operation of an HMIWI.

24. Hospital—Any facility which has an organized medical staff, maintains at least six (6) inpatient beds, and where the primary function of the institution is to provide diagnostic and therapeutic patient services and continuous nursing care primarily to human inpatients who are not related and who stay on average in

excess of twenty-four (24) hours per admissions. This definition does not include facilities maintained for the sole purpose of providing nursing or convalescent care to human patients who generally are not acutely ill but who require continuing medical supervision.

25. Hospital/medical/infectious waste incinerator (HMIWI) or HMIWI unit—Any device that combusts any amount of hospital waste and/or medical/infectious waste.

26. Hospital waste—Discards generated at a hospital, except unused items returned to the manufacturer. The definition of hospital waste does not include human corpses, remains, and anatomical parts that are intended for interment or cremation.

[4./27. Hot car—A vehicle which transfers hot coke from the oven to the area of quenching.

28. Household waste—Any solid waste (including garbage, trash, and sanitary waste in septic tanks) derived from households (including, but not limited to, single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas).

(I) All terms beginning with "I."

1. Idling—The operation of an engine where the engine is not engaged in gear.

[7./2. Incinerator—Any article, machine, equipment, contrivance, structure, or part of a structure used to burn refuse or to process refuse material by burning other than by open burning as defined in this rule. For the purpose of 10 CSR 10-5.530 only, incinerator is an enclosed combustion device that thermally oxidizes volatile organic compounds to carbon monoxide (CO) and carbon dioxide (CO₂). This term does not include devices that burn municipal or hazardous waste material. For the purpose of 10 CSR 10-5.550 only, incinerator is any enclosed combustion device that is used for destroying organic compounds. Auxiliary fuel may be used to heat waste gas to combustion temperatures. Any energy recovery section present is not physically formed into one (1) section; rather, the energy recovery system is a separate section following the combustion section and the two (2) are joined by ducting or connections that carry fuel gas.

3. Increase the frequency or severity of any existing violation of any standard in any area—To cause a nonattainment area to exceed a standard more often or to cause a violation at a greater concentration than previously existed or would otherwise exist during the future period in question, if the project were not implemented.

4. Indirect emissions—Those emissions of a criteria pollutant or its precursors—

A. That are caused or initiated by the federal action and originate in the same nonattainment or maintenance area but may occur at a different time or place;

B. That are reasonably foreseeable;

C. That the agency can practically control;

D. That which the agency has continuing program responsibility; and

E. That the federal agency can practically control and will maintain control due to a continuing program responsibility of the federal agency, including, but not limited to—

(I) Traffic on or to, or stimulated or accommodated by, a proposed facility which is related to increases or other changes in the scale or timing of operations of such facility;

(II) Emissions related to the activities of employees of contractors or federal employees;

(III) Emissions related to employee commutation and similar programs to increase average vehicle occupancy imposed on all employers of a certain size in the locality; or

(IV) Emissions related to the use of federal facilities under lease or temporary permit.

For the purposes of this definition, even if a federal licensing, rulemaking, or other approving action is a required initial step

for a subsequent activity that causes emissions, such initial steps do not mean that a federal agency can practically control any resulting emissions.

[2./5. Indirect heating source—A source operation in which fuel is burned for the primary purpose of producing steam, hot water, or hot air, or other indirect heating of liquids, gases, or solids where, in the course of doing so, the products of combustion do not come into direct contact with process materials.

6. Indoor floor covering installation adhesive—An adhesive intended by the manufacturer for use in the installation of wood flooring, carpet, resilient tile, vinyl tile, vinyl-backed carpet, resilient sheet, and roll or artificial grass. Adhesives used to install ceramic tile and perimeter bonded sheet flooring with vinyl backing onto a non-porous substrate, such as flexible vinyl, are excluded from this category.

7. Industrial boiler—A boiler used in manufacturing, processing, mining, and refining, or any other industry to provide steam, hot water, and/or electricity.

8. Industrial solid waste—Solid waste generated by manufacturing or industrial processes that is not a hazardous waste regulated under Subtitle C of the Resource Conservation and Recovery Act, 40 CFR 264 and 265. Such waste may include, but is not limited to, waste resulting from the following manufacturing processes: electric power generation; fertilizer/agricultural chemicals; food and related products/by-products; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing/foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment; and water treatment. This term does not include mining waste or oil and gas waste.

9. Industrial surface coating operation—The surface coating of manufactured items intended for distribution in commerce to persons other than the person or legal entity performing the surface coating.

10. Infectious agent—Any organism (such as a virus or bacteria) that is capable of being communicated by invasion and multiplication in body tissues and capable of causing disease or adverse health impacts in humans.

11. Initial emissions inspection—An emissions inspection consisting of the inspection series that occurs the first time a vehicle is inspected in a compliance cycle.

12. Initial fueling of motor vehicles—The operation, including related equipment, of dispensing gasoline fuel into a newly-assembled motor vehicle equipped with ORVR at an automobile assembly plant while the vehicle is still being assembled on the assembly line. Newly-assembled motor vehicles being fueled on the assembly line shall be equipped with ORVR and have fuel tanks that have never before contained gasoline fuel.

13. Ink formulation as applied—The base graphic arts coating and any additives such as thinning solvents to make up the ink material that is applied to a substrate.

14. In-line repair—The operation performed and coating(s) applied to correct damage or imperfections in the topcoat on parts that are not yet on a completely-assembled vehicle. The curing of the coatings applied in these operations is accomplished at essentially the same temperature as that used for curing the previously-applied topcoat. Also referred to as high-bake repair or high-bake reprocess and is considered part of the topcoat operation.

[3./15. Innovative control technology—Any system of air pollution control that has not been adequately demonstrated in practice but would have a substantial likelihood of achieving greater continuous emission reduction than any control system in current practice or of achieving at least comparable reductions at lower cost in terms of energy, economics, or non-air quality environmental impacts.

[4./16. Insignificant activity—An activity or emission unit in which the only applicable requirement would be to list the requirement in an operating permit application under 10 CSR 10-6.065 and is either of the following:

A. Emission units whose aggregate emission levels for the installation do not exceed that of the *de minimis* levels; and

B. Emission units or activities listed in 10 CSR 10-6.061 as exempt or excluded from construction permit review under 10 CSR 10-6.060.

[5./17. Inspector—An individual, under AHERA, who collects and assimilates information used to determine whether asbestos-containing material is present in a building or other air contaminant sources.

[6./18. Installation—All source operations including activities that result in fugitive emissions, that belong to the same industrial grouping (that have the same two (2)-digit code as described in the *Standard Industrial Classification Manual*, 1987), and any marine vessels while docked at the installation, located on one (1) or more contiguous or adjacent properties and under the control of the same person (or persons under common control).

19. Institutional cleaning—Cleaning activities conducted at organizations, societies, or corporations including but not limited to schools, hospitals, sanitariums, and prisons.

20. Institutional Vehicle—Any motor vehicle, other than a passenger vehicle, and any trailer, semitrailer, or pole trailer drawn by such a motor vehicle, that is designed, used, and maintained for the transportation of persons or property for an establishment, foundation, society, or the like, devoted to the promotion of a particular cause or program, especially one of a public, educational, or charitable character.

[7./21. Interior body spray (two (2)- and three (3)-piece)—The surface coating for the interior and ends of a two (2)-piece formed can or the surface coating of the side of the rectangular material to be used as the interior and ends of a three (3)-piece can.

22. Interior well—Any well or similar collection component located inside the perimeter of the landfill waste. A perimeter well located outside the landfill waste is not an interior well.

23. Intermediate foil mill—Batch process aluminum foil rolling mill with the work rolls in contact to reduce foil gauge. This process reduces finished sheet to intermediate foil gauges. An intermediate foil mill is used mainly in the production of aluminum foil at gauges between 0.010 inches to 0.0004 inches. Reductions to finish gauge may occur in several passes through the mill.

24. Intermediate installations—Part 70 installations that become basic state installations based on their potential to emit by accepting the imposition of voluntarily-agreed-to federally-enforceable limitations on the type of materials combusted or processed, operating rates, hours of operation, or emission rates more stringent than those otherwise required by rule or regulation.

25. Intermittent HMIWI—An HMIWI that is designed to allow waste charging, but not ash removal, during combustion.

26. Internal combustion engine—Any engine in which power, produced by heat and/or pressure developed in the engine cylinder(s) by burning a mixture of fuel and air, is subsequently converted to mechanical work by means of one (1) or more pistons.

[8./27. Internal floating roof—A product cover in a fixed roof tank which rests upon or is floated upon the VOC liquid being contained and which is equipped with a sliding seal(s) to close the space between the edge of the covers and tank shell.

[9./28. Inventory—A quantification of emissions by installation and by source operation.

(J) All terms beginning with "J."

1. Janitorial cleaning—The cleaning of building or facility components such as the floors, ceilings, walls, windows, doors, stairs, bathrooms, kitchens, etc. in nonmanufacturing areas.

2. Jet engine test cell—A stationary jet engine used for the purpose of research and testing.

3. Jobbing cupola—A cupola which has a single melting cycle operated no more than ten (10) hours in any consecutive twenty-four (24) hours and no more than fifty (50) hours in any consecutive seven (7) days.

(L) All terms beginning with “L.”

1. Lacquers—A surface coating that is basically solutions of nitrocellulose in VOCs, with plasticizers and other resins added to improve the quality of the film.

2. Laminate—A product made by bonding together two (2) or more layers of material.

3. Landfill—An area of land or an excavation in which wastes are placed for permanent disposal, and that is not a land application unit, surface impoundment, injection well, or waste pile as those terms are defined under 40 CFR 257.2.

4. Large HMIWI—An HMIWI whose maximum design waste burning capacity is more than five hundred pounds (500 lbs) per hour, or a continuous or intermittent HMIWI whose maximum charge rate is more than five hundred pounds (500 lbs) per hour, or a batch HMIWI whose maximum charge rate is more than four thousand pounds (4,000 lbs) per day. The following are not large HMIWI: a continuous or intermittent HMIWI whose maximum charge rate is less than or equal to five hundred pounds (500 lbs) per hour; or a batch HMIWI whose maximum charge rate is less than or equal to four thousand pounds (4,000 lbs) per day.

5. Lateral expansion—A horizontal expansion of the waste boundaries of an existing MSW landfill. A lateral expansion is not a modification unless it results in an increase in the design capacity of the landfill.

6. Lean-burn engine—Any two (2)- or four (4)-stroke spark-ignited (SI) engine with greater than four percent (4%) oxygen in the engine exhaust.

7. Letterpress printing—A printing process in which the image area is raised relative to the non-image area, and the ink is transferred to the substrate directly from the image surface.

8. Licensed emissions inspection station—Any business that has met the licensing requirements as specified and been licensed to offer vehicle emissions inspection services on behalf of the department.

9. Licensed emissions inspector—Any individual that has met the licensing requirements as specified and been licensed to conduct vehicle emissions inspections on behalf of the department.

10. Life-of-the-unit, firm power contractual arrangement—A unit participation power sales agreement under which a utility or industrial customer reserves, or is entitled to receive, a specified amount or percentage of nameplate capacity and associated energy from any specified unit and pays its proportional amount of such unit's total costs, pursuant to a contract—

A. For the life of the unit;

B. For a cumulative term of no less than thirty (30) years, including contracts that permit an election for early termination; or

C. For a period equal to or greater than twenty-five (25) years or seventy percent (70%) of the economic useful life of the unit determined as of the time the unit is built, with option rights to purchase or release some portion of the nameplate capacity and associated energy generated by the unit at the end of the period.

[2./11. Light/- duty truck (LDT)—Any motor vehicle rated at eight thousand five hundred pounds (8,500 lbs./.) gross weight or less *[or a derivation of this vehicle which is designed primarily for the purpose of transportation of property]*, and which has a basic vehicle frontal area of forty-five (45) square feet or less, which is—

A. Designed primarily for purposes of transportation of property or is a derivation of such a vehicle;

B. Designed primarily for transportation of persons and has a capacity of more than twelve (12) persons; or

C. Available with special features enabling off-street or off-highway operation and use.

12. Light duty vehicle (LDV)—A passenger car or passenger car derivative capable of seating twelve (12) passengers or less that is rated at six thousand pounds (6,000 lbs) GVWR or less.

13. Light liquid volatile organic compound (VOC)—A fluid VOC with a vapor pressure greater than 0.3 kilopascals (kPa) at twenty degrees Celsius (20 °C).

14. Light liquid volatile organic compound (VOC) service—A component shall be considered in such service if it contacts a process fluid containing ten percent (10%) or greater light liquid VOC by weight.

15. Liquid fuel—A combustible liquid that includes, but is not limited to, distillate oil, residual oil, waste oil, and process liquids.

[3./16. Liquid-mounted seal—A primary foam- or liquid-filled seal mounted in continuous contact with the liquid between the *[tank]* wall of the storage vessel and the floating roof around the circumference of the tank.

17. Lithographic printing—A planographic printing process where the image and non-image areas are chemically differentiated; the image area is oil receptive and the non-image area is water receptive. This method differs from other printing methods, where the image is typically printed from a raised or recessed surface. Offset lithographic printing is the only common type of lithographic printing used for commercial printing.

18. Load/unload locations—Distribution centers, warehouses, retail stores, railroad facilities, ports, and any other sites where heavy duty diesel vehicles may idle their engines while waiting to load or unload.

19. Local air quality modeling analysis—an assessment of localized impacts on a scale smaller than the entire nonattainment or maintenance area, including, for example, congested roadways on a federal facility, which uses an air quality dispersion model (e.g., Industrial Source Complex Model or Emission and Dispersion Model System) to determine the effects of emissions on air quality.

20. Long-dry kiln—A kiln fourteen feet (14') or larger in diameter, four hundred feet (400') or greater in length, which employs no preheating of the feed and the inlet feed to the kiln is dry.

21. Long-wet kiln—A kiln fourteen feet (14') or larger in diameter, four hundred feet (400') or greater in length, which employs no preheating of the feed and the inlet feed to the kiln is a slurry.

22. Low-bake coating—A coating designed to cure at temperatures below one hundred ninety-four degrees Fahrenheit (194 °F).

23. Low-level radioactive waste—Waste material which contains radioactive nuclides emitting primarily beta or gamma radiation, or both, in concentrations or quantities that exceed applicable federal or state standards for unrestricted release. Low-level radioactive waste is not high-level radioactive waste, spent nuclear fuel, or by-product material as defined by the Atomic Energy Act of 1954 (42 U.S.C. 2014(e)(2)).

24. Low-NO_x burners—A type of burner (a device that functions as an injector of fuel and combustion air into a boiler or kiln to produce a flame that burns as close as possible to the center line of the boiler or kiln) that has a series of channels or orifices that 1) allow for the adjustment of the volume, velocity, pressure, and/or direction of the air carrying the fuel, known as primary air, into the boiler or kiln and 2) impart high momentum and turbulence to the fuel stream to facilitate mixing of the fuel and secondary air.

[4./25. Lower explosive limit (LEL)—The lower limit of flammability of a gas or vapor at ordinary ambient temperatures expressed in percent of the gas or vapor in air by volume.

[5./26. Lowest achievable emission rate (LAER)—That rate of emissions which reflects—

A. The most stringent emission limitation which is contained in any state implementation plan for a class or category of source, unless the owner or operator of the proposed source demonstrates that the limitations are not achievable; or

B. The most stringent emission limitation which is achieved in practice by the class or category of source, whichever is more stringent. LAER shall not be less stringent than the new source performance standard limit.

27. Low vapor pressure hydrocarbon-based cleaning solvent—A cleaning solvent that is composed of a mixture of photochemically reactive hydrocarbons and oxygenated hydrocarbons and has a maximum vapor pressure of seven millimeters of mercury (7 mmHg) at twenty degrees Celsius (20 °C). These cleaners must not contain hazardous air pollutants.

(M) All terms beginning with “M.”

1. **MACT (Maximum achievable control technology)**—The maximum degree of reduction in emissions of the hazardous air pollutants listed in subsection (3)(C) of this rule (including a prohibition on these emissions where achievable), taking into consideration the cost of achieving emissions reductions and any non-air quality health and environmental impacts and requirements, determines is achievable for new or existing sources in the category or subcategory to which this emission standard applies, through application of measures, processes, methods, systems, or techniques including, but not limited to, measures which/—/:

A. Reduce the volume of or eliminate emissions of pollutants through process changes, substitution of materials, or other modifications;

B. Enclose systems or processes to eliminate emissions;

C. Collect, capture, or treat pollutants when released from a process, stack, storage, or fugitive emissions point;

D. Are design, equipment, work practice, or operational standards (including requirements for operational training or certification); or

E. Are a combination of subparagraphs (2)(M)1.A.–D.

2. Maintenance area—An area that was designated as nonattainment and has been re-designated in 40 CFR 81 to attainment, meeting the provisions of section 107(d)(3)(E) of the Act and has a maintenance plan approved under section 175A of the Act.

3. Maintenance operation—Normal routine maintenance on any stationary internal combustion engine or the use of an emergency standby engine and fuel system during testing, repair, and routine maintenance to verify its readiness for emergency standby use.

4. Maintenance plan—A revision to the applicable Missouri State Implementation Plan (SIP), meeting the requirements of section 175A of the CAA.

[2./5. Major modification—Any physical change or change in the method of operation at an installation or in the attendant air pollution control equipment that would result in a significant net emissions increase of any pollutant. A physical change or a change in the method of operation, unless previously limited by enforceable permit conditions, shall not include:

A. Routine maintenance, repair, and replacement of parts;

B. Use of an alternative fuel or raw material by reason of an order under Sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974, a prohibition under the Power Plant and Industrial Fuel Use Act of 1978, or by reason of a natural gas curtailment plan pursuant to the Federal Power Act;

C. Use of an alternative fuel or raw material, if prior to January 6, 1975, the source was capable of accommodating the fuel or material, unless the change would be prohibited under any

enforceable permit condition which was established after January 6, 1975;

D. An increase in the hours of operation or in the production rate unless the change would be prohibited under any enforceable permit condition which was established after January 6, 1975; or

E. Use of an alternative fuel by reason of an order or rule under Section 125 of the Clean Air Act.

[3./6. Malfunction—A sudden and unavoidable failure of air pollution control equipment or process equipment or of a process to operate in a normal and usual manner. Excess emissions caused by improper design shall not be deemed a malfunction. **For the purpose of 10 CSR 10-6.200 only, malfunction is any sudden, infrequent, and not reasonably-preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused, in part, by poor maintenance or careless operation are not malfunctions. During periods of malfunction the operator shall operate within established parameters as much as possible, and monitoring of all applicable operating parameters shall continue until all waste has been combusted or until the malfunction ceases, whichever comes first.**

7. Malfunction indicator lamp (MIL)—An amber-colored warning light located on the dashboard of vehicles equipped with On-Board Diagnostics systems indicating to the vehicle operator that the vehicle either has a malfunction or has deteriorated enough to cause a potential increase in the vehicle's tailpipe or evaporative emissions.

[4./8. Management planner—An individual, under AHERA, who devises and writes plans for asbestos abatement.

[5./9. Manure storage and application systems—Any system that includes but is not limited to lagoons, manure treatment cells, earthen storage ponds, manure storage tanks, manure stockpiles, composting areas, pits and gutters within barns, litter used in bedding systems, all types of land application equipment, and all pipes, hoses, pumps, and other equipment used to transfer manure.

10. Marine vessel—A craft capable of being used as a means of transportation on water, except amphibious vehicles.

[6./11. Maskant—A coating applied directly to an aerospace component to protect those areas when etching other parts of the component.

12. Mask coating—A thin film coating applied through a template to coat a small portion of a substrate.

13. Material safety data sheet (MSDS)—The chemical, physical, technical, and safety information document supplied by the manufacturer of the coating, solvent, or other chemical product.

14. Maximum charge rate—For continuous and intermittent HMIWI, one hundred ten percent (110%) of the lowest three (3)-hour average charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limits; for batch HMIWI, one hundred ten percent (110%) of the lowest daily charge rate measured during the most recent performance test demonstrating compliance with all applicable emission limits.

15. Maximum design heat input—The ability of a unit to combust a stated maximum amount of fuel per hour on a steady state basis, as determined by the physical design and physical characteristics of the unit.

16. Maximum fabric filter inlet temperature—One hundred ten percent (110%) of the lowest three (3)-hour average temperature at the inlet to the fabric filter (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the dioxin/furan emission limit.

17. Maximum flue gas temperature—One hundred ten percent (110%) of the lowest three (3)-hour average temperature at the outlet from the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the mercury (Hg) emission limit.

18. Maximum potential hourly heat input—An hourly heat input used for reporting purposes when a unit lacks certified monitors to report heat input. If the unit intends to use Appendix D of 40 CFR 75 to report heat input, this value should be calculated, in accordance with 40 CFR 75, using the maximum fuel flow rate and the maximum gross calorific value. If the unit intends to use a flow monitor and a diluent gas monitor, this value should be reported, in accordance with 40 CFR 75, using the maximum potential flow rate and either the maximum carbon dioxide concentration (in percent CO₂) or the minimum oxygen concentration (in percent O₂).

19. Maximum potential NO_x emission rate—The NO_x emission rate of nitrogen oxides (in lb/mmBtu) calculated in accordance with section 3 of Appendix F of 40 CFR 75, using the maximum potential nitrogen oxides concentration as defined in section 2 of Appendix A of 40 CFR 75, and either the maximum oxygen concentration (in percent O₂) or the minimum carbon dioxide concentration (in percent CO₂), under all operating conditions of the unit except for unit start-up, shutdown, and upsets.

20. Maximum rated hourly heat input—A unit-specific maximum hourly heat input (mmBtu) which is the higher of the manufacturer's maximum rated hourly heat input or the highest observed hourly heat input.

21. Mechanical shoe seal—A metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

22. Medical device—An instrument, apparatus, implement, machine, contrivance, implant, *in vitro* reagent, or other similar article, including any component or accessory that meets one (1) of the following conditions:

A. It is intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease;

B. It is intended to affect the structure or any function of the body; or

C. It is defined in the *National Formulary* or the *United States Pharmacopeia*, or any supplement to them.

23. Medical/infectious waste—Any waste generated in the diagnosis, treatment, or immunization of human beings or animals, in research pertaining thereto, or in the production or testing of biologicals as exempted in the applicable rule. The definition of medical/infectious waste does not include hazardous waste identified or listed under the regulations in 40 CFR 261; household waste, as defined in 40 CFR 261.4(b)(1); ash from incineration of medical/infectious waste, once the incineration process has been completed; human corpses, remains, and anatomical parts that are intended for interment or cremation; and domestic sewage materials identified in 40 CFR 261.4(a)(1).

A. Cultures and stocks of infectious agents and associated biologicals, including cultures from medical and pathological laboratories; cultures and stocks of infectious agents from research and industrial laboratories; wastes from the production of biologicals; discarded live and attenuated vaccines; and culture dishes and devices used to transfer, inoculate, and mix cultures.

B. Human pathological waste, including tissues, organs, and body parts and body fluids that are removed during surgery or autopsy, or other medical procedures, and specimens of body fluids and their containers.

C. Human blood and blood products including:

(I) Liquid waste human blood;

(II) Products of blood;

(III) Items saturated and/or dripping with human blood; and

(IV) Items that were saturated and/or dripping with human blood that are now caked with dried human blood including serum, plasma, and other blood components, and their con-

tainers, which were used or intended for use in either patient care, testing and laboratory analysis, or the development of pharmaceuticals. Intravenous bags are also included in this category.

D. Sharps that have been used in animal or human patient care or treatment or in medical, research, or industrial laboratories, including hypodermic needles, syringes (with or without the attached needle), pasteur pipettes, scalpel blades, blood vials, needles with attached tubing, and culture dishes (regardless of presence of infectious agents). Also included are other types of broken or unbroken glassware that were in contact with infectious agents, such as used slides and cover slips.

E. Animal waste including contaminated animal carcasses, body parts, and bedding of animals that were known to have been exposed to infectious agents during research (including research in veterinary hospitals), production of biologicals, or testing of pharmaceuticals.

F. Isolation wastes including biological waste and discarded materials contaminated with blood, excretions, exudates, or secretions from humans who are isolated to protect others from certain highly-communicable diseases, or isolated animals known to be infected with highly-communicable diseases.

G. Unused sharps including the following unused, discarded sharps: hypodermic needles, suture needles, syringes, and scalpel blades.

24. Medium HMIWI—An HMIWI whose maximum design waste burning capacity is more than two hundred pounds (200 lbs) per hour but less than or equal to five hundred pounds (500 lbs) per hour, or a continuous or intermittent HMIWI whose maximum charge rate is more than two hundred pounds (200 lbs) per hour but less than or equal to five hundred pounds (500 lbs) per hour, or a batch HMIWI whose maximum charge rate is more than one thousand six hundred pounds (1,600 lbs) per day but less than or equal to four thousand pounds (4,000 lbs) per day. The following are not medium HMIWI: a continuous or intermittent HMIWI whose maximum charge rate is less than or equal to two hundred pounds (200 lbs) per hour or more than five hundred pounds (500 lbs) per hour; or a batch HMIWI whose maximum charge rate is more than four thousand pounds (4,000 lbs) per day or less than or equal to one thousand six hundred pounds (1,600 lbs) per day.

25. Metal to urethane/rubber molding or casting adhesive—An adhesive intended by the manufacturer to bond metal to high density or elastomeric urethane or molded rubber materials to fabricate products such as rollers for computer printers or other paper handling equipment.

26. Metallic coating—A coating which contains more than five (5) grams of metal particles per liter of coating as applied. Metal particles are pieces of a pure elemental metal or a combination of elemental metals.

27. Metropolitan planning organization (MPO)—The policy board of an organization created as a result of the designation process in 23 U.S.C. 134(d) and in 49 U.S.C. 5303. It is the forum for cooperative transportation decision-making and is responsible for conducting the planning required under section 174 of the CAA.

28. Mid-kiln firing—Secondary firing in kiln systems by injecting fuel at an intermediate point in the kiln system using a specially-designed fuel injection mechanism for the purpose of decreasing NO_x emissions through—

A. The burning of part of the fuel at a lower temperature; and

B. The creation of reducing conditions at the point of initial combustion.

29. Milestone—The meaning given in sections 182(g)(1) and 189(c)(1) of the CAA. It consists of an emissions level and the date on which it is required to be achieved.

30. Military specification coating—A coating which has a formulation approved by a United States Military Agency for use on military equipment.

31. Minimum dioxin/furan sorbent flow rate—Ninety percent (90%) of the highest three (3)-hour average dioxin/furan sorbent flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the dioxin/furan emission limit.

32. Minimum mercury (Hg) sorbent flow rate—Ninety percent (90%) of the highest three (3)-hour average Hg sorbent flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the Hg emission limit.

33. Minimum horsepower or amperage—Ninety percent (90%) of the highest three (3)-hour average horsepower or amperage to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the applicable emission limit.

34. Minimum hydrogen chloride (HCl) sorbent flow rate—Ninety percent (90%) of the highest three (3)-hour average HCl sorbent flow rate (taken, at a minimum, once every hour) measured during the most recent performance test demonstrating compliance with the HCl emission limit.

35. Minimum pressure drop across the wet scrubber—Ninety percent (90%) of the highest three (3)-hour average pressure drop across the wet scrubber particulate matter (PM) control device (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the PM emission limit.

36. Minimum reagent flow rate—Ninety percent (90%) of the highest three (3)-hour average reagent flow rate at the inlet to the selective noncatalytic reduction technology (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the NO_x emissions limit.

37. Minimum scrubber liquor flow rate—Ninety percent (90%) of the highest three (3)-hour average liquor flow rate at the inlet to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with all applicable emission limits.

38. Minimum scrubber liquor pH—Ninety percent (90%) of the highest three (3)-hour average liquor pH at the inlet to the wet scrubber (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with all HCl emission limits.

39. Minimum secondary chamber temperature—Ninety percent (90%) of the highest three (3)-hour average secondary chamber temperature (taken, at a minimum, once every minute) measured during the most recent performance test demonstrating compliance with the PM, carbon monoxide (CO), dioxin/furan, and NO_x emission limits.

40. Minor violation—A violation which possesses a small potential to harm the environment or human health or cause pollution, was not knowingly committed, and is not defined by the United States Environmental Protection Agency as other than minor.

41. Missouri Decentralized Analyzer System (MDAS)—The emissions inspection equipment that is sold by the state's contractor to licensed emissions inspection stations. The department may approve alternative equipment if the equipment described in this subsection is no longer available. At a minimum, the vehicle emissions inspection equipment shall consist of the following contractor equipment package:

- A. At least a seventeen-inch (17") Liquid Crystal Display (LCD) monitor;
- B. Universal serial bus (USB) lane camera;
- C. At least a four (4.0) megapixel digital camera and dock;

- D. Fingerprint scanner;
- E. Two hundred fifty-six (256)-megabyte USB flash drive;
- F. Keyboard with plastic keyboard cover and optical mouse;

- G. Printer with ink or toner cartridges and blank paper;
- H. 2D barcode reader;
- I. Windshield sticker printer with blank windshield stickers and thermal cartridge;

- J. OBD vehicle interface cable with a standard Society of Automotive Engineers J1962/J1978 OBD connector;

- K. OBD verification tool;
- L. Low-speed or high-speed Internet connection capabilities;

- M. Surge protector and uninterruptible power supply (UPS);

- N. At least a three-gigahertz (3.0 GHz) personal computer (Dell™ Pentium® 4 or equivalent), with Windows Vista® and one (1) gigabyte of Random Access Memory (RAM); and

- O. Metal cabinet to hold all of the components described in this subsection of the rule.

42. Missouri Department of Revenue (MDOR)—The state agency responsible for the oversight of vehicle registration at contract offices and via the Internet. This agency is also responsible for the registration denial method of enforcement for the vehicle emissions inspection and maintenance program.

43. Missouri State Highway Patrol (MSHP)—The state agency responsible for the oversight of the vehicle safety inspection program and joint oversight with the department of the vehicle emissions inspection and maintenance program.

44. Mitigation measure—any method of reducing emissions of the pollutant or its precursor taken at the location of the federal action and used to reduce the impact of the emissions of that pollutant caused by the action.

45. Mobile equipment—Any equipment that is physically capable of being driven or drawn on a roadway including, but not limited to, the following types of equipment:

- A. Construction vehicles such as mobile cranes, bulldozers, concrete mixers, etc.;

- B. Farming equipment such as a wheel tractor, plow, pesticide sprayer, etc.;

- C. Hauling equipment such as truck trailers, utility bodies, etc.; and

- D. Miscellaneous equipment such as street cleaners, golf carts, etc.

[7.]46. Model year—[The annual production period of new motor vehicles designated by the calendar year in which the period ends, provided that if the manufacturer does not so designate vehicles manufactured by him/her, the model year with respect to the vehicles shall mean the twelve (12)-month period beginning January 1 of the year specified in this rule.] The manufacturer's annual production period which includes January 1 of such calendar year. If the manufacturer has no annual production period, model year shall refer to the calendar year.

47. Modeling domain—A geographic area covered by an air quality model.

[8.]48. Modification—Any physical change, or change in method of operation of, a source operation or attendant air pollution control equipment which would cause an increase in potential emissions of any air pollutant emitted by the source operation. For the purpose of 10 CSR 10-5.490 only, modification is an increase in the permitted volume design capacity of the landfill by either horizontal or vertical expansion based on its most recent permitted design capacity; modification does not occur until the owner or operator commences construction on the horizontal or vertical expansion.

[9.]49. Modification, Title I—See Title I modification.

50. **Modified HMIWI**—Any change to an HMIWI unit after the effective date of these standards such that the cumulative costs of the modifications, over the life of the unit, exceed fifty percent (50%) of the original cost of the construction and installation of the unit (not including the cost of any land purchased in connection with such construction or installation) updated to current costs, or the change involves a physical change in or change in the method of operation of the unit which increases the amount of any air pollutant emitted by the unit for which standards have been established under section 129 or section 111 of the CAA.

51. **Mold seal coating**—The initial coating applied to a new mold or a repaired mold to provide a smooth surface which, when coated with a mold-release coating, prevents products from sticking to the mold.

52. **Monitoring system**—Any monitoring system that meets the requirements as described in a specific rule, including a continuous emissions monitoring system, an excepted monitoring system, or an alternative monitoring system.

53. **Monthly throughput**—The total volume of gasoline that is loaded into all gasoline storage tanks during a month, as calculated on a rolling thirty (30)-day average.

54. **MOPETP**—The Missouri Performance Evaluation Test Procedures, a set of standards and test procedures for evaluating performance of Stage I/II vapor recovery control equipment and systems to be installed or that have been installed in Missouri.

[10.]55. **Motor tricycle**—A motor vehicle operated on three (3) wheels, including a motorcycle with any conveyance, temporary or otherwise, requiring the use of a third wheel.

[11.]56. **Motor vehicle**—Any self-propelled vehicle.

57. **Motor vehicle adhesive**—An adhesive, including glass bonding adhesive, used at an installation that is not an automobile or light duty truck assembly coating installation, applied for the purpose of bonding two (2) motor vehicle surfaces together without regard to the substrates involved.

58. **Motor vehicle bedliner**—A multi-component coating, used at an installation that is not an automobile or light duty truck assembly coating installation, applied to a cargo bed after the application of topcoat to provide additional durability and chip resistance.

59. **Motor vehicle cavity wax**—A coating, used at an installation that is not an automobile or light duty truck assembly coating installation, applied into the cavities of the motor vehicle primarily for the purpose of enhancing corrosion protection.

60. **Motor vehicle deadener**—A coating, used at an installation that is not an automobile or light duty truck assembly coating installation, applied to selected motor vehicle surfaces primarily for the purpose of reducing the sound of road noise in the passenger compartment.

61. **Motor vehicle gasket/gasket-sealing material**—A fluid, used at an installation that is not an automobile or light duty truck assembly coating installation, applied to coat a gasket or replace and perform the same function as a gasket. Automobile and light duty truck gasket/gasket-sealing material includes room temperature vulcanization (RTV) seal material.

62. **Motor vehicle glass bonding primer**—A primer, used at an installation that is not an automobile or light duty truck assembly coating installation, applied to windshield or other glass, or to body openings, to prepare the glass or body opening for the application of glass-bonding adhesives or the installation of adhesive-bonded glass. Motor vehicle glass-bonding primer includes glass-bonding/cleaning primers that perform both functions (cleaning and priming of the windshield or other glass or body openings) prior to the application of adhesive or the installation of adhesive-bonded glass.

63. **Motor vehicle lubricating wax/compound**—A protective lubricating material, used at an installation that is not an auto-

mobile or light duty truck assembly coating installation, applied to motor vehicle hubs and hinges.

64. **Motor vehicle sealer**—A high viscosity material, used at an installation that is not an automobile or light duty truck assembly coating installation, generally, but not always, applied in the paint shop after the body has received an electrodeposition primer coating and before the application of subsequent coatings (e.g., primer-surfacer). Such materials are also referred to as sealant, sealant primer, or caulk.

65. **Motor vehicle truck interior coating**—A coating, used at an installation that is not an automobile or light duty truck assembly coating installation, applied to the trunk interior to provide chip protection.

66. **Motor vehicle underbody coating**—A coating, used at an installation that is not an automobile or light duty truck assembly coating installation, applied to the undercarriage or firewall to prevent corrosion and/or provide chip protection.

67. **Motor vehicle weatherstrip adhesive**—An adhesive, used at an installation that is not an automobile or light duty truck assembly coating installation, applied to weatherstripping materials for the purpose of bonding the weatherstrip material to the surface of the motor vehicle.

[12.]68. **Motorcycle**—A motor vehicle operated on two (2) wheels.

69. **Multi-colored coating**—A coating which exhibits more than one (1) color when applied and which is packaged in a single container and applied in a single coat.

70. **Multi-component coating**—A coating requiring the addition of a separate reactive resin, commonly known as a catalyst or hardener, before application to form an acceptable dry film.

71. **Multi-day violation**—A violation which has occurred on or continued for two (2) or more consecutive or nonconsecutive days.

72. **Multiple-violation penalty**—The sum of individual administrative penalties assessed when two (2) or more violations are included in the same complaint or enforcement action.

73. **Multipurpose construction adhesive**—An adhesive intended by the manufacturer for use in the installation or repair of various construction materials, including but not limited to drywall, subfloor, panel, fiberglass reinforced plastic (FRP), ceiling tile, and acoustical tile.

74. **Municipal solid waste landfill or MSW landfill**—An entire disposal facility in a contiguous geographical space where household waste is placed in or on land. An MSW landfill may also receive other types of Resource Conservation and Recovery Act (RCRA) Subtitle D wastes, per 40 CFR 257.2, such as commercial solid waste, nonhazardous sludge, conditionally exempt small quantity generator waste, and industrial solid waste. Portions of an MSW landfill may be separated by access roads. An MSW landfill may be publicly or privately owned. An MSW landfill may be a new MSW landfill, an existing MSW landfill, or a lateral expansion.

75. **Municipal solid waste landfill emissions or MSW landfill emissions**—Gas generated by the decomposition of organic waste deposited in an MSW landfill or derived from the evolution of organic compounds in the waste.

(N) All terms beginning with “N.”

1. **Nameplate capacity**—The maximum electrical generating output (expressed as megawatt) that a generator can sustain over a specified period of time when not restricted by seasonal or other deratings, as listed in the National Allowance Data Base (NADB) under the data field “NAMECAP” if the generator is listed in the NADB or as measured in accordance with the United States Department of Energy standards. For generators not listed in the NADB, the nameplate capacity shall be used.

2. **National ambient air quality standards (NAAQS)**—those standards established pursuant to section 109 of the Act and defined by 10 CSR 10-6.010 Ambient Air Quality Standards. It

includes standards for carbon monoxide (CO), lead (Pb), nitrogen dioxide (NO₂), ozone, particulate matter (PM₁₀ and PM_{2.5}), and sulfur dioxide (SO₂);

3. Natural finish hardwood plywood panel—A panel whose original grain pattern is enhanced by essentially transparent finishes frequently supplemented by fillers and toners.

4. NEPA—the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 et seq.).

[1./5. Nearby—Nearby, as used in the definition GEP stack height in subparagraph [(2)/(G)2.B.] (2)(G)15.B. of this rule, is defined for a specific structure or terrain feature—

A. For purposes of applying the formula provided in subparagraph [(2)/(G)3.B.] (2)(G)15.B. of this rule, nearby means that distance up to five (5) times the lesser of the height or the width dimension of a structure, but not greater than one-half (1/2) mile; and

B. For conducting fluid modeling or field study demonstrations under subparagraph [(2)/(G)3.C.] (2)(G)15.C. of this rule, nearby means not greater than one-half (1/2) mile, except that the portion of a terrain feature may be considered to be nearby which falls within a distance of up to ten (10) times the maximum height of the feature, not to exceed two (2) miles if feature achieves a height one-half (1/2) mile from the stack that is at least forty percent (40%) of the GEP stack height determined by the formula provided in subparagraph [(2)/(G)3.B.] (2)(G)15.B. of this rule, or twenty-six meters (26 m), whichever is greater, as measured from the ground-level elevation at the base of the stack. The height of the structure or terrain feature is measured from the ground-level elevation at the base of the stack.

[2./6. Net emissions increase—This term is defined in 40 CFR 52.21(b)(3), promulgated as of July 1, 2003, and hereby incorporated by reference in this rule, as published by the Office of the Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, DC 20408. This rule does not incorporate any subsequent amendments or additions.

7. New—As defined for the purposes of 10 CSR 10-2.040 and 10 CSR 10-5.030, any source which is not an existing source, as defined in subsection (1)(E) of 10 CSR 10-2.040 or 10 CSR 10-5.030.

8. New Source Review (NSR)—The permitting requirements found in state rule 10 CSR 10-6.060 Construction Permits Required.

9. NMOC—Nonmethane organic compounds. Precursors to oxidant formation. They allow ozone to accumulate in the atmosphere.

10. Nonaqueous solvent—Any solvent not classifiable as an aqueous solvent as defined by a solvent in which water is the primary ingredient (greater than eighty percent (80%) by weight or greater than sixty percent (60%) by volume of solvent solution as applied must be water). Aqueous solutions must have a flash point greater than ninety-three degrees Celsius (93 °C) (two hundred degrees Fahrenheit (200 °F)) (as reported by the manufacturer) and the solution must be miscible with water.

[3./11. Nonattainment area (NAA)—[Those] Any geographic area/s in Missouri that have officially been designated by the U.S. Environmental Protection Agency/ of the United States which has been designated as nonattainment under section 107 of the CAA and described in 40 CFR [part] 81 [as nonattainment areas].

12. Nonattainment pollutant—Each and every pollutant for which the location of the source is in an area designated to be in nonattainment of a National Ambient Air Quality Standard (NAAQS) under section 107(d)(1)(A)(i) of the Act. Any constituent or precursor of a nonattainment pollutant shall be a nonattainment pollutant, provided that the constituent or precursor pollutant may only be regulated as part of regulation of the corresponding NAAQS pollutant. Both volatile organic compounds (VOC) and nitrogen oxides (NO_x) shall be nonattainment

pollutants for a source located in an area designated nonattainment for ozone.

13. Nondegradable waste—Any waste that does not decompose through chemical breakdown or microbiological activity. Examples are, but are not limited to, concrete, municipal waste combustor ash, and metals.

14. Nonpermanent final finish—A material such as a wax, polish, nonoxidizing oil, or similar substance that must be periodically reapplied to a surface over its lifetime to maintain or restore the reapplied material's intended effect.

15. Non-Title V permit—A federally-enforceable permit administered by the director pursuant to the CAA and regulatory authority under the CAA, other than Title V of the CAA and 40 CFR 70 or 40 CFR 71.

16. Normal maintenance—Repair or replacement of vapor recovery control equipment and/or gasoline dispensing components/dispensers that does not require breaking of concrete (by any method) and does not require removal of dispenser(s) from island(s).

17. Normal source operation—The average actual activity rate of a source necessary for determining the actual emissions rate for the two (2) years prior to the date necessary for determining actual emissions, unless some other time period is more representative of the operation of the source or otherwise approved by the staff director.

18. Normally-closed container—A storage container that is closed unless an operator is actively engaged in activities such as emptying or filling the container.

19. NO_x allowance—An authorization by the department or the administrator under a NO_x trading program to emit one (1) ton of NO_x during the control period of the specified year or of any year thereafter.

20. NO_x allowance deduction or deduct NO_x allowances—The permanent withdrawal of NO_x allowances by the administrator from a NO_x allowance tracking system compliance account or overdraft account to account for the number of tons of emissions from a NO_x budget unit for a control period, determined in accordance with a rule, or for any other NO_x allowance surrender obligation required.

21. NO_x allowance tracking system—The system by which the director or the administrator records allocations, deductions, and transfers of NO_x allowances under a NO_x trading program.

22. NO_x allowance tracking system account—An account in the NO_x allowance tracking system established by the director or administrator for purposes of recording the allocation, holding, transferring, or deducting of NO_x allowances.

23. NO_x allowances held—The NO_x allowances recorded by the director or administrator, or submitted to the director or administrator for recordation, in accordance with a rule, in a NO_x allowance tracking system account.

24. NO_x authorized account representative—The natural person who is authorized by the owners or operators of the source and all NO_x budget units at the source, in accordance with all applicable rules, to represent and legally bind each owner and operator in matters pertaining to a NO_x trading program or, for a general account, the natural person who is authorized, to transfer or otherwise dispose of NO_x allowances held in the general account in accordance with the applicable rules.

25. NO_x budget emissions limitation—For a NO_x budget unit, the tonnage equivalent of the NO_x allowances available for compliance deduction for the unit and for a control period adjusted by any deductions of such NO_x allowances to account for actual utilization for the control period or to account for excess emissions for a prior control period or to account for withdrawal from the NO_x budget program or for a change in regulatory status for an affected unit.

26. NO_x budget permit—The legally-binding and federally-enforceable written document, or portion of such document,

issued by the director, including any permit revisions, specifying the NO_x budget trading program requirements applicable to a NO_x budget source, to each NO_x budget unit at the NO_x budget source, and to the owners and operators and the NO_x authorized account representative of the NO_x budget source and each NO_x budget unit.

27. NO_x budget source—A source that includes one (1) or more NO_x budget units.

28. NO_x budget trading program—A multi-state nitrogen oxides air pollution control and emission reduction program pursuant to 40 CFR 51.121, as a means of mitigating the interstate transport of ozone and nitrogen oxides, an ozone precursor.

29. NO_x budget unit—A unit that is subject to the NO_x budget trading program emissions limitation under section (1) or paragraph (3)(H)1. of 10 CSR 10-6.360.

30. NO_x emission rate—The amount of NO_x emitted by a combustion unit in pounds per million British thermal units of heat input as recorded by approved monitoring devices.

31. NO_x emissions limitation—For an affected unit, the tonnage equivalent of the NO_x emissions rate available for compliance deduction for the unit and for a control period adjusted by any deductions of such NO_x allowances to account for actual utilization for the control period or to account for excess emissions for a prior control period or to account for withdrawal from a NO_x trading program or for a change in regulatory status for an affected unit.

32. NO_x opt-in unit—An EGU whose owner or operator has requested to become an affected unit under a NO_x trading program and has been approved by the department.

33. NO_x unit—Any fossil-fuel-fired stationary boiler, combustion turbine, internal combustion engine, or combined cycle system.

(O) All terms beginning with “O.”

1. Offset—A decrease in actual emissions from a source operation or installation that is greater than the amount of emissions anticipated from a modification or construction of a source operation or installation. The decrease must be of the same pollutant and have substantially-similar environmental and health effects on the impacted area. Any ratio of decrease to increase greater than one to one (1:1) constitutes offset. The exception to this are ozone nonattainment areas where VOC and NO_x emissions will require an offset ratio of actual emission reduction to new emissions according to the following schedule: marginal area = 1.1:1; moderate area = 1.15:1; serious area = 1.2:1; severe area = 1.3:1; and extreme area = 1.5:1.

2. Offset printing—A lithographic printing process that transfers the ink film from the lithographic plate to an intermediary surface (rubber-covered blanket cylinder), which, in turn, transfers the ink film to the substrate.

[2./3. Offtake—Any set of piping (for example, standpipes, goosenecks) that interconnects a coke oven with a collecting main which is common to all systems. The offtake system extends from the connection on top of the coke oven to the connection on the collecting main.

4. On-Board Diagnostics (OBD)—A vehicle emissions early-warning system required by federal law to be installed on all light duty 1996 and newer model year vehicles for sale in the United States. The OBD system monitors sensors and emissions-control related components on a vehicle to ensure that the emissions control system operates properly throughout a vehicle's lifetime. If one (1) or more components of the emissions control system malfunctions or deteriorates, the OBD system will illuminate the Malfunction Indicator Lamp (MIL) and store one (1) or more Diagnostic Trouble Codes (DTCs).

5. On-Board Diagnostics (OBD) test—A test in which a vehicle's OBD system is connected to a handheld tool or computer that an inspector uses to determine and/or collect and record—

A. The status of the OBD system's MIL when the vehicle

engine is off and when the vehicle engine is running;

B. Data link connector access and functionality and OBD communication;

C. Vehicle signature information, including, but not limited to, the electronic vehicle identification number (VIN) and other unique parameter identifiers;

D. The status of all of the OBD system's readiness monitors;

E. The OBD system's MIL command status; and

F. Any DTCs, including those that are commanding the MIL to be illuminated.

6. Onboard refueling vapor recovery (ORVR)—A system on motor vehicles designed to recover hydrocarbon vapors that escape during refueling.

7. Onboard refueling vapor recovery (ORVR) compatible—A Stage II vapor recovery system certified by CARB or other acceptable independent third-party evaluator, using test methods approved by the director, as ORVR compatible which maintains a required minimum overall system efficiency of ninety-five percent (95%), as certified under third-party evaluation, while dispensing fuel without difficulty to both ORVR-equipped and non-ORVR-equipped vehicles.

8. One-component coating—A coating that is ready for application as it comes out of its container to form an acceptable dry film. A thinner, necessary to reduce the viscosity, is not considered a component.

[3./9. Opacity—The extent to which airborne material obstructs the transmission of incident light and obscures the visual background. Opacity is stated as a percentage of light obstructed and can be measured by a continuous opacity monitoring system or a trained observer. An opacity of one hundred percent (100%) represents a condition in which no light is transmitted, and the background is completely obscured.

[4./10. Open burning—The burning of any materials where air contaminants resulting from combustion are emitted directly into the ambient air without passing through a stack or chimney from an enclosed chamber. For purposes of this definition, a chamber shall be regarded as enclosed, when, during the time combustion takes place, only those apertures, ducts, stacks, flues, or chimneys, as are necessary to provide combustion air and to permit the escape of exhaust gases, are open.

[5./11. Open-top vapor degreaser—A type of degreaser which consists of a tank where solvent is heated to its boiling point which creates a zone of solvent vapor contained by a set of cooling coils. Condensation of the hot solvent vapor cleans or degreases the colder metal parts.

12. Operating—With regard to a unit under part (3)(C)3.D.(II) and paragraph (3)(H)1. of 10 CSR 10-6.360, having documented heat input for more than eight hundred seventy-six (876) hours in the six (6) months immediately preceding the submission of an application for an initial NO_x budget permit under subparagraph (3)(H)4.A. of 10 CSR 10-6.360.

13. Operating day—A twenty four (24)-hour period between 12:00 midnight and the following midnight during which any amount of hospital waste or medical/infectious waste is combusted at any time in the HMIWI.

14. Operating parameter value—A minimum or maximum value established for a control device or process parameter that, if achieved by itself or in combination with one (1) or more other operating parameter values, determines that an owner or operator has complied with an applicable emission limit.

15. Operation—The period during which waste is combusted in the incinerator excluding periods of startup or shutdown.

16. Operator—Any person who operates, controls, or supervises a NO_x budget unit, a NO_x budget source, or an affected unit under a NO_x trading program, and shall include, but not be limited to, any holding company, utility system, or plant manager of such a unit or source.

17. **Opt-in**—To voluntarily become an affected unit under a NO_x trading program.

18. **Optical coating**—A coating applied to an optical lens.

19. **Optical device**—An optical element used in an electro-optical device and designed to sense, detect, or transmit light energy, including specific wavelengths of light energy and changes in light energy levels.

20. **Organic solvent**—A liquid containing volatile organic compounds that is used for dissolving or dispersing constituents in a coating, adjusting the viscosity of a coating, cleaning, or washoff. When used in a coating, the organic solvent evaporates during drying and does not become a part of the dried film.

21. **Output**—The shaft work output from any engine plus the energy reclaimed by any useful heat recovery system.

16./22. **Outstate area**—Any area throughout the state except the City of St. Louis and St. Charles, St. Louis, Jefferson, Franklin, Clay, Cass, Buchanan, Ray, Jackson, Platte, and Greene counties.

23. **Outdoor floor covering installation adhesive**—Any adhesive intended by the manufacturer for use in the installation of floor covering that is not in an enclosure and that is exposed to ambient weather conditions during normal use.

24. **Overall control efficiency**—The efficiency of a control system, calculated as the product of the capture and control device efficiencies, expressed as a percentage.

25. **Overdraft account**—The NO_x allowance tracking system account established by the director or administrator for each NO_x budget source where there are two (2) or more NO_x budget units or for each NO_x authorized account representative.

17./26. **Owner or operator**—Any person who owns, leases, operates, controls, or supervises an air contaminant source. For the purpose of 10 CSR 10-6.360 only, owner is any of the following persons:

A. Any holder of any portion of the legal or equitable title in a NO_x budget unit;

B. Any holder of a leasehold interest in a NO_x budget unit;

C. Any purchaser of power from a NO_x budget unit under a life-of-the-unit, firm power contractual arrangement. However, unless expressly provided for in a leasehold agreement, owner shall not include a passive lessor, or a person who has an equitable interest through such lessor, whose rental payments are not based, either directly or indirectly, upon the revenues or income from the NO_x budget unit; or

D. With respect to any general account, any person who has an ownership interest with respect to the NO_x allowances held in the general account and who is subject to the binding agreement for the NO_x authorized account representative to represent that person's ownership interest with respect to NO_x allowances.

27. **Ozone season**—From May 1 through September 30 of each year.

(P) All terms beginning with "P."

1. **Pail**—Any nominal cylindrical container of one to twelve (1–12)-gallon capacity.

2. **Paint**—A pigmented surface coating using VOCs as the major solvent and thinner which converts to a relatively opaque solid film after application as a thin layer.

3. **Pan-backing coating**—A coating applied to the surfaces of pots, pans, or other cooking implements that are exposed directly to a flame or other heating elements.

4. **Paper, film, and foil coating**—A web coating process that applies a continuous layer of coating material across essentially the entire width or any portion of the width of a web substrate to—

A. Provide a covering, finish, or functional or protective layer to a substrate;

B. Saturate a substrate for lamination; or

C. Provide adhesion between two (2) substrates for lamination.

13./5. **Part 70**—U.S. Environmental Protection Agency regula-

tions, codified at 40 CFR [part] 70, setting forth requirements for state operating permit programs pursuant to Title V of the Act.

6. **Part 70 installations**—Installations to which the part 70 operating permit requirements of rule 10 CSR 10-6.065 apply, in accordance with the following criteria:

A. They emit or have the potential to emit, in the aggregate, ten (10) tons per year (tpy) or more of any hazardous air pollutant, other than radionuclides, or twenty-five (25) tpy or more of any combination of these hazardous air pollutants or such lesser quantity as the administrator may establish by rule. Notwithstanding the preceding sentence, emissions from any oil or gas exploration or production well (with its associated equipment) and emissions from any pipeline compressor or pump station shall not be aggregated with emissions from other similar units, whether or not these units are in a contiguous area or under common control, to determine whether these units or stations are subject installations. For sources of radionuclides, the criteria shall be established by the administrator;

B. They emit or have the potential to emit one hundred (100) tpy or more of any air pollutant, including all fugitive air pollutants. The fugitive emissions of an installation shall not be considered unless the installation belongs to one (1) of the source categories listed in 10 CSR 10-6.020(3)(B), Table 2;

C. They are located in nonattainment areas or ozone transport regions.

(I) For ozone nonattainment areas, sources with the potential to emit one hundred (100) tpy or more of volatile organic compounds or oxides of nitrogen in areas classified as "marginal" or "moderate," fifty (50) tpy or more in areas classified as "serious," twenty-five (25) tpy or more in areas classified as "severe," and ten (10) tpy or more in areas classified as "extreme"; except that the references in this paragraph to one hundred (100), fifty (50), twenty-five (25), and ten (10) tpy of nitrogen oxides shall not apply with respect to any source for which the administrator has made a finding, under section 182(f)(1) or (2) of the Act, that requirements under section 182(f) of the Act do not apply;

(II) For ozone transport regions established pursuant to section 184 of the Act, sources with the potential to emit fifty (50) tpy or more of volatile organic compounds;

(III) For carbon monoxide nonattainment areas that are classified as "serious," and in which stationary sources contribute significantly to carbon monoxide levels as determined under rules issued by the administrator, sources with the potential to emit fifty (50) tpy or more of carbon monoxide; and

(IV) For particulate matter less than ten (10) micrometers (PM₁₀) nonattainment areas classified as "serious," sources with the potential to emit seventy (70) tpy or more of PM₁₀;

D. They are affected sources under Title IV of the 1990 Act;

E. They are solid waste incinerators subject to section 129(e) of the Act;

F. Any installation in a source category designated by the administrator as a part 70 source pursuant to 40 CFR 70.3; and

G. Installations that would be part 70 sources strictly due to the following criteria are not subject to part 70 source requirements until the administrator subjects this installation to these requirements by rule:

(I) They are subject to a standard, limitation or other requirement under section 111 of the Act, including area sources; or

(II) They are subject to a standard or other requirement under section 112 of the Act, except that a source, including an area source, is not required to obtain a permit solely because it is subject to rules or requirements under section 112(r) of the Act.

14./7. **Particulate matter**—Any material, except uncombined water, that exists in a finely-divided form as a liquid or solid and as

specifically defined as follows:

A. PM—any airborne, finely-divided solid or liquid material with an aerodynamic diameter smaller than one hundred (100) micrometers as measured in the ambient air as specified in 10 CSR 10-6.040(4)(B); and

B. PM₁₀—particulate matter with an aerodynamic diameter less than or equal to a nominal ten (10) micrometers as measured in the ambient air as specified in 10 CSR 10-6.040(4)(J); and

C. PM_{2.5}—particulate matter with an aerodynamic diameter less than or equal to a nominal two and one-half (2.5) micrometers including the filterable component as measured in the ambient air as specified in 10 CSR 10-6.040(4)(L).

For the purpose of 10 CSR 10-6.200 only, particulate matter, or PM, is the total particulate matter emitted from an HMIWI as measured by EPA Reference Method 5 of 40 CFR 60, Appendix A-3 or EPA Reference Method 29 of 40 CFR 60, Appendix A-8.

8. Passenger tire equivalent (PTE)—The weight of waste tires or parts of waste tires equivalent to the average weight of one (1) passenger tire. The average weight of one (1) passenger tire is equal to twenty pounds (20 lbs).

9. Passenger vehicle—Every motor vehicle, except motorcycles, motor-driven cycles, and ambulances, designed for carrying ten (10) passengers or less and used for the transportation of persons.

10. Passive collection system—A gas collection system that solely uses positive pressure within the landfill to move the gas rather than using gas mover equipment.

11. Pathological waste—Waste material consisting of only human or animal remains, anatomical parts, and/or tissue, the bags/containers used to collect and transport the waste material, and animal bedding (if applicable).

12. Peak load—The maximum instantaneous operating load.

13. Peak ozone season—The time period (the months of June 1 through August 31) used in calculating ozone nonattainment area emissions on Emissions Inventory Questionnaire Form 2.0Z.

14. Peaking combustion unit—A combustion turbine normally reserved for operation during the hours of highest daily, weekly, or seasonal loads.

15. Perimeter bonded sheet flooring installation—The installation of sheet flooring with vinyl backing onto a nonporous substrate using an adhesive designed to be applied only to a strip of up to four inches (4") wide around the perimeter of the sheet flooring.

[5./16. Permanent shutdown—The permanent cessation of operation of any air pollution control equipment or process equipment, not to be placed back into service or have a start-up.

17. Permitted capacity factor—The annual permitted fuel use divided by the manufacturers' specified maximum fuel consumption times eight thousand seven hundred sixty (8,760) hours per year.

[6./18. Permitting authority—Either the administrator or the state air pollution control agency, local agency, or other agency authorized by the administrator to carry out a permit program as intended by the Act.

[7./19. Person—Any individual, partnership, **copartnership**, association, **firm**, **company**, **public or private** corporation including the parent company of a wholly-owned subsidiary, **joint stock company**, municipality, **political** subdivision, [or] agency, **board**, **department or bureau** of the state or **federal government**, trust, estate, or other legal entity either public or private **which is recognized by law as the subject of rights and duties**. This shall include any legal successor, employee, or agent of the previous entities.

[8./ 20. Petroleum liquid—Petroleum, condensate, and any finished or intermediate products manufactured in a petroleum refinery with the exception of Numbers 2-6 fuel oils as specified in ASTM D (396-69), gas turbine fuel oils Number 2-GT-4-GT, as specified in ASTM D(2880-71), and diesel fuel oils Number 2-D and 4-D, as specified in ASTM D(975-68).

[9./21. Petroleum refinery—Any facility which produces gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation, cracking, extraction, or reforming of unfinished petroleum derivatives.

[10./22. Pharmaceutical—Any compound or preparation included under the Standard Industrial Classification Codes 2833 (Medicinal Chemicals and Botanical Products) and 2834 (Pharmaceutical Preparations), excluding products formulated by fermentation, extraction from vegetable material or animal tissue, or formulation and packaging of the final product.

[11./23. Pilot plants—The installations which are of new type or design which will serve as a trial unit for experimentation or testing.

[12./24. Plant-mix—A mixture produced in an asphalt mixing plant that consists of mineral aggregate uniformly coated with asphalt cement, cutback asphalt, or emulsified asphalt.

25. Plastic—A synthetic material chemically formed by the polymerization of organic substances and capable of being molded, extruded, cast into various shapes and films, or drawn into filaments.

26. Plastic foam—Foam constructed of plastics.

27. Plastic solvent welding adhesive—An adhesive intended by the manufacturer for use to dissolve the surface of plastic to form a bond between mating surfaces.

28. Plastic solvent welding adhesive primer—A primer intended by the manufacturer for use to prepare plastic substrates prior to bonding or welding.

29. Pleasure craft—A marine vessel which is manufactured or operated primarily for recreational purposes or leased, rented, or chartered to a person or business for recreational purposes.

30. Pleasure craft coating—A marine coating, except unsaturated polyester resin (fiberglass) coatings, applied by brush, spray, roller, or other means to a pleasure craft.

[13./31. Pollutant—An air contaminant listed in 10 CSR 10-6.020(3)(A), Table 1 without regard to levels of emission or air quality impact.

[14./32. Polyethylene bag sealing operation—Any operation or facility engaged in the sealing of polyethylene bags, usually by the use of heat.

[15./33. Polystyrene resin—The product of any styrene polymerization process, usually involving heat.

34. Polyvinyl chloride (PVC) plastic—A polymer of the chlorinated vinyl monomer that contains fifty-seven percent (57%) chlorine.

35. Polyvinyl chloride welding adhesive—An adhesive intended by the manufacturer for use in the welding of PVC plastic pipe.

36. Porous material—A substance that has tiny openings, often microscopic, in which fluids may be absorbed or discharged, including, but not limited to, paper and corrugated paperboard. For the purposes of 10 CSR 10-5.330, porous material does not include wood.

[16./37. Portable equipment—Any equipment that is designed and maintained to be movable, primarily for use in noncontinuous operations. Portable equipment includes rock crushers, asphaltic concrete plants, and concrete batching plants.

[17./38. Portable equipment installation—An installation made up solely of portable equipment, meeting the requirements of or having been permitted according to 10 CSR 10-6.060(4).

39. Portland cement—A hydraulic cement produced by pulverizing clinker consisting essentially of hydraulic calcium silicates, usually containing one (1) or more of the forms of calcium sulfate as an interground addition.

40. Portland cement kiln—A system, including any solid, gaseous, or liquid fuel combustion equipment, used to calcine and fuse raw materials, including limestone and clay, to produce Portland cement clinker.

[18.]41. Positive crankcase ventilation system—Any system or device which prevents the escape of crankcase emissions to the ambient air.

[19.]42. Potential to emit—The emission rates of any pollutant at maximum design capacity. Annual potential shall be based on the maximum annual-rated capacity of the installation assuming continuous year-round operation. Federally-enforceable permit conditions on the type of materials combusted or processed, operating rates, hours of operation, and the application of air pollution control equipment shall be used in determining the annual potential. Secondary emissions do not count in determining annual potential.

[20.]43. Potroom—A building unit which houses a group of electrolytic cells in which aluminum is produced.

[21.]44. Potroom group—An uncontrolled potroom, a potroom which is controlled individually, or a group of potrooms or potroom segments ducted to a common or similar control system.

45. Precursors of a criteria pollutant are—

A. For ozone, nitrogen oxides (NO_x), unless an area is exempted from NO_x requirements under section 182(f) of the CAA, and volatile organic compounds (VOCs);

B. For PM_{10} , those pollutants described in the PM_{10} nonattainment area applicable SIP as significant contributors to the PM_{10} levels; and

C. For $\text{PM}_{2.5}$ —

(I) Sulfur dioxide (SO_2) in all $\text{PM}_{2.5}$ nonattainment and maintenance areas;

(II) Nitrogen oxides in all $\text{PM}_{2.5}$ nonattainment and maintenance areas unless both the state and EPA determine that it is not a significant precursor; and

(III) Volatile organic compounds (VOC) and ammonia (NH_3) only in $\text{PM}_{2.5}$ nonattainment or maintenance areas where either the state or EPA determines that they are significant precursors.

46. Predictive emissions monitoring system (PEMS)—A system that uses process and other parameters as inputs to a computer program or other data reduction system to predict values in terms of the applicable emission limitation or standard.

47. Prefabricated architectural component coating—A coating applied to metal parts and products which are to be used as an architectural structure.

48. Preheater/precalciner kiln—A kiln where the feed to the kiln system is preheated in cyclone chambers and that utilizes a second burner to provide heat for calcination of material prior to the material entering the rotary kiln which forms clinker.

49. Preheater kiln—A kiln where the feed to the kiln system is preheated in cyclone chambers prior to the final fusion, which forms clinker.

50. Press—A printing production assembly that can be made up of one (1) or many units to produce a finished product.

51. Pretreatment coating—A coating which contains no more than twelve percent (12%) solids by weight, but at least one-half percent (0.5%) acids by weight, is used to provide surface etching, and is applied directly to metal surfaces to provide corrosion resistance, adhesion, and ease of stripping.

52. Pretreatment wash primer—A coating which contains no more than twenty-five percent (25%) solids by weight, but at least one-tenth of a percent (0.1%) acids by weight, is used to provide surface etching, and is applied directly to fiberglass and metal surfaces to provide corrosion resistance and adhesion of subsequent coatings.

[22.]53. Primary aluminum reduction installation—Any facility manufacturing aluminum by electrolytic reduction of alumina.

54. Primary chamber—The chamber in an HMIWI that receives waste material, in which the waste is ignited, and from which ash is removed.

55. Primary fuel—The fuel that provides the principal heat input to the device. To be considered primary, the fuel must be able to sustain operation without the addition of other fuels.

[23.]56. Primer—The first *[surface]* layer and any subsequent layers of identically-formulated coating applied to the *[surface]* article to provide corrosion resistance, surface etching, surface leveling, adhesion promotion, or other property depending on the end use or exposure of the final product. Primers that are defined as specialty coatings are not included under this definition.

[24.]57. Primer-surfacer—*[The surface coatings applied over the primer and beneath the topcoat.]* An intermediate protective coating applied over the electrodeposition primer and under the topcoat at an automobile or light duty truck assembly coating facility. Primer-surfacer provides adhesion, protection, and appearance properties to the total finish. Primer-surfacer may also be called guide coat or surfacer.

58. Printed interior panel—A panel whose grain or natural surface is obscured by fillers and basecoats upon which a simulated grain or decorative pattern is printed.

59. Printing—Any operation that imparts color, images, or text onto a substrate using printing inks.

60. Printing ink—Any fluid or viscous composition used in printing, impressing, or transferring an image onto a substrate. Varnishes and coatings applied with offset lithographic and letterpress printing presses are inks and are part of the applicable printing process, not a separate operation such as paper coating.

61. Process—Any collection of structures and/or equipment that processes, assembles, applies, or otherwise uses material inputs to produce or store an intermediate or final product. A single facility may contain more than one (1) process or production unit.

62. Process heater—Any enclosed device using controlled flame, that is not a boiler, and the unit's primary purpose is to transfer heat indirectly to a process material (liquid, gas, or solid) or to heat transfer material for use in a process unit, instead of generating steam. Process heaters are devices in which the combustion gases do not directly come into contact with process materials. Process heaters do not include units used for comfort heat or space heat, food preparation for onsite consumption, or autoclaves.

63. Process unit—For the purpose of 10 CSR 10-5.550 only, equipment assembled and connected by pipes or ducts to produce, as intermediates or final products, one (1) or more SOCM chemicals (see Appendix A of Control of Volatile Organic Compound Emissions from Reactor Processes and Distillation Operations Processes in the Synthetic Organic Chemical Manufacturing Industry, EPA-450/4-91-031). A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient product storage facilities.

[25.]64. Process weight—The total weight of all materials introduced into *[a source operation]* an emission unit, including solid fuels which may cause any emission of particulate matter, but excluding liquids and gases used solely as fuels and *[excluding]* air introduced for purposes of combustion.

65. Process weight rate—A rate in tons per hour established as follows:

A. The rate of materials introduced to the process which may cause any emission of particulate matter;

B. For continuous or long-run steady-state emission units, the total process weight for the entire period of continuous operation or for a typical portion, divided by the number of hours of that period or portion;

C. For cyclical or batch emission units, the total process weight for a period of time which covers a complete operation or an integral number of cycles, divided by the hours of actual process operation during that period; or

D. Where the nature of any process or operation or the design of any equipment permits more than one (1) interpretation of this section, that interpretation which results in the minimum value for allowable emission shall apply.

66. Product—For the purpose of 10 CSR 10-5.550 only, any compound or SOCM chemical (see Appendix A of Control of Volatile Organic Compound Emissions from Reactor Processes and Distillation Operations Processes in the Synthetic Organic Chemical Manufacturing Industry, EPA-450/4-91-031) that is produced as that chemical for sales as a product, by-product, co-product, or intermediate or for use in the production of other chemicals or compounds.

67. Production—Any collection of structures and/or equipment, that processes, assembles, applies, or otherwise uses material inputs to produce or store an intermediate or final product. A single facility may contain more than one (1) process or production unit.

[26./68. Production equipment exhaust system—A device for collecting and directing out of the work area fugitive emissions from reactor openings, centrifuge openings, and other vessel openings and equipment for the purpose of protecting workers from excessive exposure.

69. Project-specific net emissions increase—The difference between permitted emissions to be emitted by the project that triggered a prevention of significant deterioration review and the baseline emission inventory for the applicable project.

70. Protocol—A replicable and workable method to estimate the mass of emissions reductions, or the amount of ERCs needed for compliance.

71. Public vehicle—Any motor vehicle, other than a passenger vehicle, and any trailer, semi-trailer, or pole trailer drawn by such a motor vehicle, which is designed, used, and maintained for the transportation of persons or property at the public expense and under public control.

[27./72. Publication rotogravure printing—Rotogravure printing upon paper which is subsequently formed into books, magazines, catalogues, brochures, directories, newspaper supplements, and other types of printed materials.

[28./73. Pushing operation—The process of removing coke from the coke oven. The coke-pushing operation begins when the coke-side oven door is removed and is completed when the hot car enters the quench tower and the coke-side oven door is replaced.

74. Pyrolysis—The endothermic gasification of hospital waste and/or medical/infectious waste using external energy.

(Q) All terms beginning with “Q.”

1. Qualifying repair—Any repair or adjustment performed on a vehicle's emissions control system after failing an initial emissions inspection that is reasonable to the test method failure. A qualifying repair is submitted as part of a cost-based waiver application and must document, to the department's satisfaction, the diagnostic testing or analysis method used by the person performing the repair. Repairs performed by a repair technician that were not authorized by the vehicle owner's signature or verbal consent may not be considered a qualifying repair. The qualifying repair must be performed within ninety (90) days after the date of initial emissions inspection. The initial or subsequent emissions reinspection should support the necessity of the qualifying repair. The qualifying repair may consist of either—

A. The parts costs, spent by a vehicle owner or charged to a vehicle owner by a repair technician, that are appropriate for the type of emissions inspection failure; or

B. The parts and recognized labor costs, charged to a vehicle owner by a Recognized Repair Technician, that are appropriate for the type of emissions inspection failure.

2. Quantifiable—The quantity of emission reductions can be measured or estimated by accurate and replicable techniques. These techniques shall be at least as accurate and replicable as the techniques accepted by the U.S. EPA, where accepted techniques exist.

(R) All terms beginning with “R.”

1. Reactive adhesive—An adhesive system composed, in part, of volatile monomers that react during the adhesive curing

reaction, and, as a result, do not evolve from the film during use. These volatile components instead become integral parts of the adhesive through chemical reaction. At least seventy percent (70%) of the liquid components of the system, excluding water, react during the process.

[1./2. Reactor—A vat or vessel, which may be jacketed to permit temperature control, designed to contain chemical reactions.

3. Reactor processes—Unit operations in which one (1) or more chemicals, or reactants other than air, are combined or decomposed in such a way that their molecular structures are altered and one (1) or more new organic compounds are formed.

4. Readiness monitor—A design feature of On-Board Diagnostics systems. If a readiness monitor has been set, then the OBD system has completed a diagnostic check on that component. If a readiness monitor has not been set, then the OBD system has not completed a diagnostic check on that component.

5. Reasonably-foreseeable emissions—Projected future direct and indirect emissions that are identified at the time the conformity determination is made; the location of such emissions is known and the emissions are quantifiable, as described and documented by the federal agency based on its own information and after reviewing any information presented to the federal agency.

6. Receive or receipt of—When referring to the director or the administrator, to come into possession of a document, information, or correspondence (whether sent in writing or by authorized electronic transmission), as indicated in an official correspondence log, or by a notation made on the document, information, or correspondence, by the director or the administrator in the regular course of business.

7. Recognized labor costs—The labor costs that a Recognized Repair Technician charges for emissions repair services rendered to a vehicle that fails its emissions inspection. Labor costs not tied to an emissions repair or solely for the purposes of setting readiness monitors may not be considered qualifying repairs.

8. Recognized Repair Technician—Any person who—

A. Is professionally engaged full-time in vehicle repair or employed by an ongoing business whose purpose is vehicle repair. A Recognized Repair Technician may only be recognized by the department at one (1) place of employment;

B. Has valid certifications from the National Institute for Automotive Service Excellence (ASE) in Electrical Systems (A6), Engine Performance (A8), and Advanced Engine Performance Specialist (L1) that have not expired; and

C. Has not been reported by the department to the attorney general for unlawful merchandising practices according to subsection 643.330.4, RSMo.

[2./9. Reconstruction—Where the fixed capital cost of the new components exceeds fifty percent (50%) of the fixed capital cost of a comparable entirely new source of operation or installation; the use of an alternative fuel or raw material by reason of an order in effect under /S/sections 2(a) and (b) of the Energy Supply and Environmental Coordination Act of 1974, by reason of a natural gas curtailment plan in effect pursuant to the Federal Power Act, or by reason of an order or rule under /S/section 125 of the Clean Air Act, shall not be considered reconstruction. In determining whether a reconstruction will occur, the provisions of 40 CFR 60.15, December 1, 1979, shall be considered by the director.

10. Recordation, record, or recorded—With regard to NO_x allowances, the movement of NO_x allowances by the director or administrator from one (1) NO_x allowance tracking system account to another, for purposes of allocation, transfer, or deduction.

11. Recoverable fuel—Fuels that have been permitted for use for energy recovery under 10 CSR 10-6.065.

12. Recovery device—An individual unit of equipment, such as an adsorber, carbon adsorber, or condenser, capable of and

used for the purpose of recovering chemicals for use, reuse, or sale.

13. Recovery system—An individual recovery device or series of such devices applied to the same vent stream.

14. Recycled on-site—The reuse of an organic solvent in a process other than cleaning or washoff.

15. Reduction—Any heated process, including rendering, cooking, drying, dehydrating, digesting, evaporating, and protein concentrating.

16. Reference method—Any method of sampling and analyzing for an air pollutant that is published in Appendix A of 40 CFR 60.

17. Refinishing—The process of coating motor vehicles, or their parts, that is subsequent to the original coating applied at an original equipment manufacturing plant.

[3./18. Refuse—The garbage, rubbish, trade wastes, leaves, salvageable material, agricultural wastes, or other wastes.

19. Regionally-significant action—A federal action for which the direct and indirect emissions of any pollutant represent ten percent (10%) or more of a nonattainment or maintenance area's emissions inventory for that pollutant;

20. Regional water or wastewater projects—Include construction, operation, and maintenance of water or wastewater conveyances, water or wastewater treatment facilities, and water storage reservoirs which affect a large portion of a nonattainment or maintenance area.

[4./21. Regulated air pollutant—All air pollutants or precursors for which any standard has been promulgated.

[5./22. Regulated asbestos-containing material (RACM)—Friable asbestos material; category I nonfriable asbestos-containing material (ACM) that has become friable; category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations regulated by this rule.

[6./23. Regulated pollutant—Any regulated air pollutant except carbon monoxide and pollutants regulated exclusively under section 112(r) or Title VI of the Act.

[7./24. Reid vapor pressure (RVP)—The absolute vapor pressure of a petroleum liquid as determined by "Tests for Determining Reid Vapor Pressure (RVP) of Gasoline and Gasoline-Oxygenate Blends" 40 CFR [part] 80, Appendix E as in effect July 1, 1990.

25. Reinforced plastic composite—A composite material consisting of plastic reinforced with fibers.

26. Related cleaning activity—The removal of coating residue or other unwanted materials from equipment related to coating operations as well as the cleaning of spray guns, transfer line, tanks, and the interior of spray booths.

27. Renewable fuel—Renewable energy resources that include but are not limited to solar (photovoltaic), wind, and biomass. Biomass includes but is not limited to: agricultural crops and crop waste, untreated wood and wood wastes, livestock waste, wastepaper, and organic municipal solid waste.

[8./28. Renewal—The process by which an operating permit is reissued at the end of its term.

[9./29. Repair—The restoration of asbestos material that has been damaged. Repair consists of the application of rewettable glass cloth, canvas, cement, or other suitable material. It may also involve filling damaged areas with nonasbestos substitutes and reencapsulating or painting previously-encapsulated materials.

30. Repair coating—A coating used to re-coat portions of a previously-coated product which has sustained mechanical damage to the coating following normal coating operations.

31. Reporting year—The state reporting requirement will coincide with the three (3)-year reporting cycle of the CERCLA, beginning with 2008. The subsequent reporting years will be every three (3)-years following 2008 (i.e., 2011, 2014, 2017, etc.).

32. Research and development activities—Activities conducted at a research or laboratory facility whose primary purpose is to conduct research and development into new processes and products, where such source is operated under the close supervision of technically-trained personnel and is not engaged in the manufacture of products for sale or exchange for commercial profit, except in a *de minimis* manner.

33. Research and development emissions unit—Any combustion unit operated only for the purpose of research and development work.

34. Residence time—Period of time in which gas in a thermal oxidizer, incinerator, or afterburner is exposed to heat and oxygen at a specified temperature in order to destroy pollutants present in the gas.

[10./35. Residual fuel oil—The fuel oil variously known as Bunker C, PS 400, and Number 6 as defined in ASTM D (396-487) (1959).

36. Resist coat—A coating that is applied to a plastic part before metallic plating to prevent deposits of metal on portions of the plastic part.

[11./37. Responsible official—Includes one (1) of the following:

A. The president, secretary, treasurer, or vice-president of a corporation in charge of a principal business function, any other person who performs similar policy and decision-making functions for the corporation, or a duly-authorized representative of this person if the representative is responsible for the overall operation of one (1) or more manufacturing, production, or operating facilities applying for or subject to a permit and either—

(I) The facilities employ more than two hundred fifty (250) persons or have a gross annual sales or expenditures exceeding twenty-five (25) million dollars (in second quarter 1980 dollars); or

(II) The delegation of authority to this representative is approved in advance by the permitting authority;

B. A general partner in a partnership or the proprietor in a sole proprietorship;

C. Either a principal executive officer or ranking elected official in a municipality[, /] or state, federal, or other public agency. For the purpose of this subparagraph, a principal executive officer of a federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency; or

D. The designated representative of an affected source insofar as actions, standards, requirements, or prohibitions under Title IV of the Act or the regulations promulgated under the Act are concerned and the designated representative for any other purposes under part 70.

38. Restricted information—Information that is privileged or that is otherwise protected from disclosure pursuant to applicable statutes, executive orders, or regulations. Such information includes, but is not limited to, classified national security information, protected critical infrastructure information, sensitive security information, and proprietary business information.

[12./39. Retail outlet—Any establishment where gasoline is sold, offered for sale, or used as a motor vehicle fuel.

40. Rich-burn engine—A two (2)- or four (4)-stroke SI engine where the oxygen content in the exhaust stream before any dilution is one percent (1%) or less measured on a dry basis.

[13./41. Road-mix—An asphalt course produced by mixing mineral aggregate and cutback or emulsified asphalt at the road site by means of travel plants, motor graders, drags, or special road-mixing equipment.

[14./42. Roll printing—The application of words, designs, and pictures to a substrate, usually by means of a series of hard rubber or steel rolls each with only partial coverage.

[15./43. Roller spreader—The device used for the application of a coating material to a substrate by means of hard rubber or steel rolls.

44. Rolling lubricant—Petroleum-based oil usually mixed with additives. The lubricant is used to cool the work rolls and provide lubrication for the product in contact with the work rolls.

[16.]45. Rotogravure printing—The application of words, designs, and pictures to a substrate by means of a roll-printing technique which involves an intaglio or recessed image areas in the form of cells.

46. Rubber—Any natural or manmade rubber substrate, including, but not limited to, styrene-butadiene rubber, polychloroprene (neoprene), butyl rubber, nitrile rubber, chlorosulfonated polyethylene, and ethylene propylene diene terpolymer.

(S) All terms beginning with "S."

1. Safety-indicating coating—A coating which changes physical characteristics, such as color, to indicate unsafe conditions.

[1.]2. Salvage operation—Any business, trade, industry, or other activity conducted in whole or in part for the purpose of salvaging or reclaiming any product or material.

3. Sealer—A finishing material used to seal the pores of a wood substrate before additional coats of finishing material are applied. Washcoats, which are used in some finishing systems to optimize aesthetics, are not sealers.

[2.]4. Sealing material—A liquid substance that does not contain asbestos which is used to cover a surface that has previously been coated with a friable asbestos-containing material for the intended purpose of preventing any asbestos fibers remaining on the surface from being disburled into the air. This substance shall be distinguishable from the surface to which it is applied.

5. Secondary chamber—A component of the HMIWI that receives combustion gases from the primary chamber and in which the combustion process is completed.

[3.]6. Secondary emissions—The emissions which occur or would occur as a result of the construction or operation of an installation or major modification but do not come from the installation or major modification itself. Secondary emissions must be specific, well-defined, quantifiable, and impact the same general area as the installation or modification which causes the secondary emissions. Secondary emissions may include, but are not limited to:

A. Emissions from trucks, ships, or trains coming to or from the installation or modification; and

B. Emissions from any off-site support source which would not be constructed or increase its emissions except as a result of the construction or operation of the major stationary source or major modification.

[4.]7. Section 502(b)(10) changes—Changes that contravene an express permit term. These changes do not include those that would violate applicable requirements or contravene federally-enforceable permit terms and conditions that are monitoring (including test methods), record keeping, reporting, or compliance certification requirements.

8. Self-priming topcoat—A topcoat that is applied directly to a vehicle or component for purposes of corrosion prevention, environmental protection, and function fluid resistance. More than one (1) layer of identical coating formulation may be applied to the vehicle or component.

9. Semi-aqueous cleaning solvent—A solution in which water is a primary ingredient (greater than sixty percent (60%) by weight of the solvent solution as applied must be water).

10. Serial number—When referring to NO_x allowances, the unique identification number assigned to each NO_x allowance by the administrator or director.

[5.]11. Sheet basecoat—The roll coated primary interior surface coating applied to surfaces for the basic protection of buffering filling material from the metal can surface.

12. Sheet-fed—A printing press where individual sheets of substrate are fed into the press sequentially.

13. Sheet rubber lining installation—The process of applying sheet rubber liners by hand to metal or plastic substrates to protect the underlying substrate from corrosion or abrasion. These

operations also include laminating sheet rubber to fabric by hand.

14. Shock-free coating—A coating applied to electrical components to protect the user from electric shock. The coating has characteristics of being of low capacitance and high resistance and having resistance to breaking down under high voltage.

[6.]15. Shutdown—The cessation of operation of any air pollution control equipment or process equipment, excepting the routine phasing out of process equipment. For the purpose of 10 CSR 10-6.200 only, shutdown is the period of time after all waste has been combusted in the primary chamber. For continuous HMIWI, shutdown shall commence no less than two (2) hours after the last charge to the incinerator. For intermittent HMIWI, shutdown shall commence no less than four (4) hours after the last charge to the incinerator. For batch HMIWI, shutdown shall commence no less than five (5) hours after the high-air phase of combustion has been completed. For the purpose of 10 CSR 10-6.410 only, shutdown is rendering an installation or unit inoperable by physically removing, dismantling, or otherwise disabling the installation or unit so that it could not be reactivated without obtaining a new permit in accordance with 10 CSR 10-6.060.

[7.]16. Shutdown, permanent—See permanent shutdown.

17. Side-seam coating—A coating applied on the interior and/or exterior of a welded, cemented, or soldered seam to protect the exposed metal.

[8.]18. Significant—A net emissions increase or potential to emit at a rate equal to or exceeding the *de minimis* levels or create an ambient air concentration at a level greater than those listed in 10 CSR 10-6.060(11)(D) Table 4, or any emissions rate or any net emissions increase associated with an installation subject to 10 CSR 10-6.060 which would be constructed within ten kilometers (10 km) of a Class I area and have an air quality impact on the area equal to or greater than one microgram per cubic meter (1 µg/m³) (twenty-four (24)-hour average). For purposes of new source review under 10 CSR 10-6.060 sections (7) and (8), net emission increases of hazardous air pollutants exceeding the *de minimis* levels are considered significant only if they are also criteria pollutants.

19. Silicone release coating—A coating which contains silicone resin and is intended to prevent food from sticking to metal surfaces, such as baking pans.

20. Similar source—A stationary source or process that has comparable emissions and is structurally similar in design and capacity to a constructed or reconstructed major source such that the source could be controlled using the same control technology.

21. Single-ply roof membrane—A prefabricated single sheet of rubber, normally ethylene propylene diene terpolymer, that is field applied to a building roof using one (1) layer of membrane material. For the purposes of rule 10 CSR 10-5.330, single-ply roof membrane does not include membranes prefabricated from EPDM.

22. Single-ply membrane adhesive primer—A primer labeled for use to clean and promote adhesion of the single-ply roof membrane seams or splices prior to bonding.

23. Single-ply membrane installation and repair adhesive—An adhesive labeled for use in the installation or repair of single-ply roof membrane. Installation includes, as a minimum, attaching the edge of the membrane to the edge of the roof and applying flashings to vents, pipes, or ducts that protrude through the membrane. Repair includes gluing the edges of torn membrane together, attaching a patch over a hole, and reapplying flashings to vents, pipes, or ducts installed through the membrane.

24. Six (6)-minute period—A three-hundred-sixty (360)-consecutive-second time interval. Six (6)-minute block averages shall be utilized for COMS data per the provisions of Appendix B to 40 CFR 60, Performance Specification 1, promulgated as of July 1, 2007, and hereby incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol

Street NW, Washington, DC 20401. This definition does not incorporate any subsequent amendments or additions.

25. Sludge—Any solid, semisolid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility, exclusive of the treated effluent from a wastewater treatment plant.

26. Small HMIWI—An HMIWI whose maximum design waste burning capacity is less than or equal to two hundred (200) pounds per hour, or a continuous or intermittent HMIWI whose maximum charge rate is less than or equal to two hundred (200) pounds per hour, or a batch HMIWI whose maximum charge rate is less than or equal to one thousand six hundred (1,600) pounds per day. The following are not small HMIWI: a continuous or intermittent HMIWI whose maximum charge rate is more than two hundred (200) pounds per hour; a batch HMIWI whose maximum charge rate is more than one thousand six hundred (1,600) pounds per day.

[9./27. Smoke—Small gas-borne particles resulting from combustion, consisting of carbon, ash, and other material.

28. Smoke generating device—A specialized piece of equipment which is not an integral part of a commercial, industrial, or manufacturing process and whose sole purpose is the creation and dispersion of fine solid or liquid particles in a gaseous medium.

29. Soils—Includes, but is not limited to, unwanted grease, wax, grit, ash, dirt, and oil.

30. Solar absorbent coating—A coating which has as its prime purpose the absorption of solar radiation.

31. Solid film lubricant—A very thin coating consisting of a binder system containing as its chief pigment material one (1) or more of the following:

A. Molybdenum;

B. Graphite;

C. Polytetrafluoroethylene (PTFE); and

D. Other solids that act as a dry lubricant between closely- or tightly-fitting surfaces.

32. Solid fuel—A solid material used as a fuel that includes, but is not limited to, coal, wood, biomass, tires, plastics, and other nonfossil solid materials.

33. Solid waste—Any garbage, sludge from a wastewater treatment plant, water supply treatment plant, or air pollution control facility; and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities but does not include solid or dissolved material in domestic sewage, or solid or dissolved materials in irrigation return flows or industrial discharges that are point sources subject to permits under 33 U.S.C. 1342, or source, special nuclear, or by-product material as defined by the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.)

34. Solids—See coating solids.

35. Solids turnover ratio (R_p)—The ratio of total volume of coating solids that is added to the electrodeposition primer system in a calendar month divided by the total volume design capacity of the electrodeposition primer system.

[10./36. Solvent—Organic materials which are liquid at standard conditions and which are used as dissolvers, viscosity reducers, or cleaning agents.

[11./37. Solvent metal cleaning—The process of cleaning soils from metal surfaces by cold cleaning or open-top vapor degreasing or conveyorized degreasing.

38. Source—Any governmental, institutional, commercial, or industrial structure, installation, plant, building, or facility that emits or has the potential to emit any regulated air pollutant under the CAA. For purposes of section 502(c) of the CAA, a "source," including a "source" with multiple units, shall be considered a single "facility."

[12./39. Source gas volume—The volume of gas arising from a process or other source operation.

[13./40. Source operation—See emission unit.

41. Specially-constructed vehicle—A motor vehicle that has not been originally constructed under a distinctive name, make, model, or type by a manufacturer of motor vehicles, that has been issued a specially-constructed VIN number from the MDOR, and that has had the specially-constructed VIN installed by the MSHP. The term specially-constructed vehicle includes kit vehicles that are motor vehicles assembled by a person other than a generally-recognized manufacturer of motor vehicles by the use of a glider kit or replica purchased from an authorized manufacturer and accompanied by a manufacturer's statement of origin.

42. Specialty coating—A coating that, even though it meets the definition of a primer, topcoat, or self-priming topcoat, has additional performance criteria beyond those of primers, topcoats, and self-priming topcoats for specific applications. These performance criteria may include, but are not limited to, temperature or fire resistance, substrate compatibility, anti-reflection, temporary protection, or marking, sealing, adhesively-joining substrates, or enhanced corrosion protection.

43. Spray gun cleaner—Equipment used to clean spray guns used to apply, but not limited to, primers, paints, specialty coatings, adhesives, sealers, resins, or deadeners incorporated into a product distributed in commerce.

44. Spray gun soils—Include, but are not limited to, unwanted grease, wax, grit, ash, dirt, oil, unwanted primers, paint, specialty coatings, adhesives, sealers, resins, and deadeners.

[14./45. Springfield-Greene County area—The geographical area contained within Greene County.

[15./46. St. Louis metropolitan area—The geographical area comprised of St. Louis, St. Charles, Jefferson, and Franklin Counties and the City of St. Louis.

[16./47. Stack—Any spatial point in an installation designed to emit air contaminants into ambient air. An accidental opening such as a crack, fissure, or hole is a source of fugitive emissions, not a stack.

[17./48. Staff director—Director of the Air Pollution Control Program of the Department of Natural Resources.

[18./49. Stage I vapor recovery system—A system used to capture the gasoline vapors that would otherwise be emitted when gasoline is transferred from a loading installation to a *[delivery vessel]* cargo tank or from a *[delivery vessel]* cargo tank to a storage tank.

[19./50. Stage II vapor recovery system—A system used to capture the gasoline vapors that would otherwise be emitted when gasoline is dispensed *[into a vehicle fuel tank by routing vapors back to the fuel storage tank.]* from a storage tank to the fuel tank of a motor vehicle. For MOPETP, Stage II vapor recovery includes both Stage I and Stage II Vapor Recovery equipment and requirements, unless otherwise stated.

51. Stain—Any color coat having a solids content by weight of no more than eight percent (8%) that is applied in single or multiple coats directly to the substrate. Includes, but is not limited to, nongrain raising stains, equalizer stains, sap stains, body stains, no-wipe stains, penetrating stains, and toners.

[20./52. Standard conditions—A gas temperature of seventy degrees Fahrenheit (70 °F) and a gas pressure of 14.7 pounds per square inch absolute (psia).

53. Standard metropolitan statistical area or SMSA—Any areas listed in Office of Management and Budget Bulletin No. 93-17 entitled "Revised Statistical Definitions for Metropolitan Areas" dated June 30, 1993, and hereby incorporated by reference in this rule, as published by the National Technical Information Services, 5285 Port Royal Road, Springfield, VA 22161. This rule does not incorporate any subsequent amendments or additions.

/21./54. Start-up—The setting into operation of any air pollution control equipment or process equipment, except the routine phasing in of process equipment. For the purpose of 10 CSR 10-6.200 only, start-up is the period of time between the activation of the system and the first charge to the unit. For batch HMIWI, start-up means the period of time between activation of the system and ignition of the waste.

55. Start-up unit—A unit operated only to start up larger electric generating units.

/22./56. State—Any nonfederal permitting authority, including any local agency, interstate association, or statewide program. When clear from its context, state shall have its conventional territorial definition. For the purpose of 10 CSR 10-6.360 only, state is one (1) of the forty-eight (48) contiguous states and the District of Columbia specified in 40 CFR 51.121, or any non-federal authority in or including such states or the District of Columbia (including local agencies and statewide agencies) or any eligible Indian tribe in an area of such state or the District of Columbia that adopts a NO_x budget trading program pursuant to 40 CFR 51.121. To the extent a state incorporates by reference the provisions of this part, the term “state” shall mean the incorporating state. The term “state” shall have its conventional meaning where such meaning is clear from the context.

/23./57. State implementation plan—A series of plans adopted by the commission, submitted by the director, and approved by the administrator[,] detailing methods and procedures to be used in attaining and maintaining the ambient air quality standards in Missouri.

58. State trading program NO_x budget—The total number of tons apportioned to all NO_x budget units in a given state, in accordance with the NO_x budget trading program, for use in a given control period.

59. Stationary internal combustion engine—Internal combustion engine of the reciprocating type that is either attached to a foundation at a facility or is designed to be capable of being carried or moved from one (1) location to another and remains at a single site at a building, structure, facility, or installation for more than twelve (12) consecutive months. Any engine(s) that replace(s) an engine at a site that is intended to perform the same or similar function as the engine replaced is included in calculating the consecutive time period. Nonroad engines and engines used solely for competition are not stationary internal combustion engines.

60. Stationary source—Any building, structure, facility, or installation which emits or may emit any air pollutant subject to regulation under the CAA. Building, structure, facility, or installation includes all pollutant emitting activities that are located on one (1) or more contiguous or adjacent properties and are under the common control of the same person(s).

61. Stencil coating—An ink or a pigmented coating which is applied over a stencil in order to add identifying letters, symbols, and/or numbers.

62. Stoichiometric air/fuel ratio—The air/fuel ratio where all fuel and all oxygen in the air/fuel mixture will be consumed.

63. Stoker boiler—A boiler design that employs a grate assembly to combust coal.

64. Storage container—Vessel or tank, including mix equipment, used to hold finishing, cleaning, or washoff materials.

/24./65. Storage tank—Any tank, reservoir, or vessel which is a container for liquids or gases, where no manufacturing process or part of it[,] takes place.

66. Strippable booth coating—A coating that—

A. Is applied to a booth wall to provide a protective film to receive overspray during finishing operations;

B. That is subsequently peeled off and disposed; and

C. By achieving A. and B. above, reduces or eliminates the need to use organic solvents to clean booth walls.

67. Structural glazing—A process that includes the applica-

tion of adhesive to bond glass, ceramic, metal, stone, or composite panels to exterior building frames.

68. Subfloor installation—The installation of subflooring material over floor joists, including the construction of any load-bearing joists. Subflooring is covered by a finish surface material.

/25./69. Submerged fill pipe—Any fill pipe the discharge opening of which is entirely submerged when the liquid level is six inches (6") above the bottom of the tank. Submerged fill pipe when applied to a tank which is loaded from the side is defined as any fill pipe, the discharge opening of which is entirely submerged when the liquid level is eighteen inches (18") or twice the diameter of the fill pipe, whichever is greater, above the bottom of the tank.

70. Submerged filling—The filling of a gasoline storage tank through a submerged fill pipe with a discharge no more than six inches (6") (no more than twelve inches (12") for submerged fill pipes installed on or before November 9, 2006) from the bottom of the tank. Bottom filling of gasoline storage tanks is included in this definition.

71. Submit or serve—To send or transmit a document, information, or correspondence to the person specified in accordance with the applicable regulation—

A. In person;

B. By United States Postal Service; or

C. By other means of dispatch or transmission and delivery. Compliance with any “submission,” “service,” or “mailing” deadline shall be determined by the date of dispatch, transmission, or mailing and not the date of receipt.

72. Substrate—The surface onto which coatings are applied (or into which coatings are impregnated).

73. Sufficient density—Any number, spacing, and combination of collection system components, including vertical wells, horizontal collectors, and surface collectors, necessary to maintain emission and migration control as determined by measures of performance as set forth.

74. Sufficient extraction rate—A rate sufficient to maintain a negative pressure at all wellheads in the collection system without causing air infiltration, including any wellheads connected to the system as a result of expansion or excess surface emissions, for the life of the blower.

75. Surface coating line—Same as a surface coating unit.

76. Surface coating operation—Same as industrial surface coating operation.

77. Surface coating unit—One (1) or more coating applicators and any associated drying area and/or oven wherein a coating is applied, dried, and/or cured. A coating unit ends at the point where the coating is dried or cured, or prior to any subsequent application of a different coating. It is not necessary for a coating unit to have an oven or flash-off area.

/26./78. Synthesized pharmaceutical manufacturing—Manufacture of pharmaceutical products by chemical synthesis.

79. System—For vapor recovery, a combination of MOPETP-approved (Stage I and Stage II) equipment and components demonstrated to achieve the required efficiencies.

(T) All terms beginning with “T.”

1. Tangentially-fired boiler—A boiler that has coal and air nozzles mounted in each corner of the furnace where the vertical furnace walls meet. Both pulverized coal and air are directed from the furnace corners along a line tangential to a circle lying in a horizontal plane of the furnace.

2. Take or start the federal action—The date that the federal agency signs or approves the permit, license, grant, or contract or otherwise physically begins the federal action that requires a conformity evaluation.

3. Temporary boiler—Any gaseous or liquid fuel boiler that is designed to be, and is capable of being, carried or moved from one (1) location to another. A temporary boiler that remains at a location for more than one hundred eighty (180) days during any

three hundred sixty-five (365)-day period is no longer considered to be a temporary boiler. Any temporary boiler that replaces a temporary boiler at a location and is intended to perform the same or similar function will be included in calculating the consecutive time period.

[1.]/4. Temporary installation—An installation which operates or emits pollutants less than two (2) years.

5. Texture coat—A coating that is applied to a plastic part which, in its finished form, consists of discrete raised spots of the coating.

6. Thin metal laminating adhesive—An adhesive intended by the manufacturer for use in bonding multiple layers of metal to metal or metal to plastic in the production of electronic or magnetic components in which the thickness of the bond line(s) is less than 0.25 millimeters.

7. Tileboard—A premium interior wall paneling product made of hardboard that is used in high-moisture areas of the home, such as kitchens and bathrooms, and meets the specifications for Class I hardboards as approved by the American National Standards Institute.

8. Tire-derived fuel—The end product of a process that converts whole scrap tires into a specific chipped form capable of being used as fuel.

9. Tire repair—A process that includes expanding a hole, tear, fissure, or blemish in a tire casing by grinding or gouging, applying adhesive, and filling the hole or crevice with rubber.

[2.]/10. Title I modification—Any modification that requires a permit under 10 CSR 10-6.060 section (7) or (8)/, or that is subject to any requirement under 10 CSR 10-6.070 or 10 CSR 10-6.080.

11. Title V operating permit—A permit issued under Title V of the CAA and 40 CFR 70 or 40 CFR 71.

12. Title V operating permit regulations—The regulations that the administrator has approved or issued as meeting the requirements of Title V of the CAA and 40 CFR 70 or 40 CFR 71.

13. Ton or tonnage—Any “short ton” (i.e., two thousand pounds (2,000 lbs)). For the purpose of determining compliance with the NO_x budget emissions limitation, total tons for a control period shall be calculated as the sum of all recorded hourly emissions (or the tonnage equivalent of the recorded hourly emissions rates) in accordance with applicable requirements, with any remaining fraction of a ton equal to or greater than one-half (0.50) ton deemed to equal one (1) ton and any fraction of a ton less than one-half (0.50) ton deemed to equal zero (0) tons.

[3.]/14. Topcoat—The [surface coatings] last film-building finishing material applied for the purpose of establishing the color or protective surface, or both, including groundcoat and paint sealer materials, base coat, and clear coat. Nonpermanent final finishes are not topcoats.

[4.]/15. Total fluoride—The elemental fluorine and all fluoride compounds as measured by reference methods specified in 10 CSR 10-6.030(12) or equivalent or alternative methods.

16. Total of direct and indirect emissions—The sum of direct and indirect emissions increases and decreases caused by the federal action; that is, the net emissions considering all direct and indirect emissions. Any emissions decreases used to reduce such total shall have already occurred or shall be enforceable under state and federal law. The portion of emissions which are exempt or presumed to conform under subsection (3)(C), (D), (E), or (F) of 10 CSR 10-6.300 are not included in the “total of direct and indirect emissions,” except as provided in subsection (3)(J) of 10 CSR 10-6.300. The “total of direct and indirect emissions” includes emissions of criteria pollutants and emissions of precursors of criteria pollutants. The segmentation of projects for conformity analyses when emissions are reasonably foreseeable is not permitted by this rule.

17. Total organic compounds or “TOC”—Those compounds measured according to the procedures of Method 18 of 40 CFR

60, Appendix A. For the purposes of measuring molar compositions as required in subparagraph (3)(B)3.D. of 10 CSR 10-5.550; hourly emissions rate as required in subparagraph (3)(B)5.D. of 10 CSR 10-5.550 and paragraph (3)(B)2. of 10 CSR 10-5.550; and TOC concentration as required in paragraph (4)(A)4. of 10 CSR 10-5.550. The definition of TOC excluded those compounds that the administrator designates as having negligible photochemical reactivity. The administrator has designated the following organic compounds negligibly reactive: methane; ethane; 1,1,1-trichloroethane; methylene chloride; trichlorofluoromethane; dichlorodifluoromethane; chlorodifluoromethane; trifluoromethane; trichlorotrifluoroethane; dichlorotetrafluoroethane; and chloropentafluoroethane.

18. Total resource effectiveness index value or “TRE index value”—A measure of the supplemental total resource requirement per unit reduction of organic hazardous air pollutants associated with a process vent stream, based on vent stream flow rate, emission rate of volatile organic compound, net heating value, and corrosion properties (whether or not the vent stream contains halogenated compounds) as quantified by the given equations. The TRE index is a decision tool used to determine if the annual cost of controlling a given vent gas stream is acceptable when considering the emissions reduction achieved.

19. Touch-up coating—A coating used to cover minor coating imperfections appearing after the main coating operation.

20. Touch-up and repair operation—That portion of the coating operation that is the incidental application of finishing materials used to cover minor imperfections in the coating finish or to achieve complete coverage. This definition includes out-of-sequence or out-of-cycle coating.

[5.]/21. Trade waste—The solid, liquid, or gaseous material resulting from construction or the prosecution of any business, trade, or industry or any demolition operation including, but not limited to, plastics, cardboard cartons, grease, oil, chemicals, or cinders.

22. Traffic coatings—Coatings formulated for and applied to public streets, highways, and other surfaces including, but not limited to, curbs, berms, driveways, and parking lots.

[6.]/23. Transfer efficiency (TE)—Ratio of the amount of coating solids transferred onto a product to the total of coating solids used. In any surface coating operation, TE is the ratio of solids in a coating that adhere on a target surface to the total solids used in the process for coating the target surface.

24. Translucent coating—A coating which contains binders and pigment and is formulated to form a colored, but not opaque, film.

25. Treated wood—Wood that has been subjected to a chemical process or application.

26. Tribal implementation plan (TIP)—A plan to implement the national ambient air quality standards adopted and submitted by a federally-recognized Indian tribal government determined to be eligible under 40 CFR 49.9 and the plan has been approved by EPA.

[7.]/27. True vapor pressure—The equilibrium partial pressure exerted by a petroleum liquid as determined in American Petroleum Institute Bulletin 2517, *Evaporation Loss from Floating Roof Tanks*, 1962.

28. Type I etchant—A chemical milling etchant that contains varying amounts of dissolved sulfur and does not contain amines.

29. Type II etchant—A chemical milling etchant that is a strong sodium hydroxide solution containing amines.

(U) All terms beginning with “U.”

1. Uncombined water—The visible condensed water which is not bound, physically or chemically, to any air contaminant.

2. Unit—A fossil-fuel-fired combustion device such as a stationary boiler, combustion turbine, or combined cycle system. For the purpose of 10 CSR 10-6.390 only, unit is any diesel, lean-burn, or rich-burn stationary internal combustion engine as defined in this rule.

3. Unit load—The total (i.e., gross) output of a unit in any control period (or other specified time period) produced by combusting a given heat input of fuel expressed in terms of—

A. The total electrical generation (expressed as megawatt) produced by the unit, including generation for use within the plant; or

B. In the case of a unit that uses heat input for purposes other than electrical generation, the total steam flow (lb/hr) or total steam pressure (psia) produced by the unit, including steam for use by the unit.

4. Unit operating day—A calendar day in which a unit combusts any fuel.

5. Unit operating hour or hour of unit operation—Any hour or fraction of an hour during which a unit combusts fuel.

6. Unit operations—Discrete processing steps that occur within distinct equipment that are used to prepare reactants, facilitate reactions, separate and purify products, and recycle materials.

7. Untreated wood—Lumber and other wooden materials that have not been chemically treated for resistance to moisture, fire, fungi, insects, and other pests, or has not otherwise been treated or manufactured with chemicals, or that does not contain adhesives or resins. Untreated wood does not include plywood, particleboard, chipboard, and wood with other-than-insignificant quantities of paint, coating, or finish.

8. U.S. EPA—The United States Environmental Protection Agency.

9. User source—Any source that seeks to use ERCs to comply with an applicable emission reduction requirement.

10. Utilization—The heat input (expressed in mmBtu/time) for a unit. The unit's total heat input for the control period in each year will be determined in accordance with 40 CFR 75 if the NO_x budget unit was otherwise subject to the requirements of 40 CFR 75 for the year or will be based on the best available data reported to the administrator for the unit if the unit was not otherwise subject to the requirements of 40 CFR 75 for the year.

11. Utilization rate—The amount of an engine's capacity reported in horsepower-hours that is utilized.

(V) All terms beginning with "V."

1. Vacuum-metalizing coating—Topcoats and basecoats that are used in the vacuum-metalizing process.

[1./2. Vapor recovery system—A vapor gathering system capable of collecting the hydrocarbon vapors and gases discharged and a vapor disposal system capable of processing the hydrocarbon vapors and gases so as to limit their emission to the atmosphere.

3. Vapor recovery system modification—Any repair, replacement, alteration, or upgrading of Stage I or Stage II vapor recovery control equipment or gasoline dispensing equipment equipped with Stage II vapor recovery beyond normal maintenance of the system as permitted by the staff director.

[2./4. Vapor tight—When applied to a delivery vessel or vapor recovery system as one that sustains a pressure change of no more than seven hundred fifty (750) pascals (three inches (3") of H₂O) in five (5) minutes when pressurized to a gauge pressure of four thousand five hundred (4,500) pascals (eighteen inches (18") of H₂O) or evacuated to a gauge pressure of one thousand five hundred (1,500) pascals (six inches (6") of H₂O).

[3./5. Varnish—An unpigmented surface coating containing VOC and composed of resins, oils, thinners, and driers used to give a glossy surface to wood, metal, etc.

[4./6. Vehicle—Any mechanical device on wheels, designed primarily for use on streets, roads, or highways, except those propelled or drawn by human or animal power or those used exclusively on fixed rails or tracks.

7. Vehicle Inspection Database (VID)—The vehicle inspection database, operated and maintained by the department's contractor. All vehicle emissions inspection information is uploaded

by the MDAS inspection equipment to the VID on a real-time basis as soon as each inspection is complete.

8. Vehicle Inspection Report (VIR)—The vehicle inspection report printed by the MDAS inspection equipment at the conclusion of each vehicle's emissions inspection. The VIR is designed solely to provide information regarding the emissions inspection results to motorists and may not be valid for vehicle registration purposes.

9. Vent—A point of emission from a unit operation. Typical process vents from batch processes include condenser vents, vacuum pumps, steam ejectors, and atmospheric vents from reactors and other process vessels. Vents also include relief valve discharges. Equipment exhaust systems that discharge from unit operations also would be considered process vents.

10. Vent stream—Any gas stream discharge directly from a distillation operation or reactor process to the atmosphere or indirectly to the atmosphere after diversion through other process equipment. The vent stream excludes relief valve discharges and equipment leaks including, but not limited to, pumps, compressors, and valves.

[5./11. Vinyl coating—[The application of a] A functional, decorative, or protective topcoat[,] or printing [or] applied to vinyl-coated fabric or vinyl sheets.

[6./12. Visible emission—Any discharge of an air contaminant, including condensibles, which reduces the transmission of light or obscures the view of an object in the background.

[7./13. Volatile organic compounds (VOC)—[For all areas in Missouri, VOC means a] Any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate, that participates in atmospheric photochemical reactions to produce ozone.

A. The following compounds are not considered VOCs because of their known lack of participation in the atmospheric reactions to produce ozone:

CAS #	Compound
138495428	1,1,1,2,3,4,4,5,5,5-decafluoropentane (HFC 43-10mee)
431890	1,1,1,2,3,3,3-heptafluoropropane (HFC 227ea)
375031	1,1,1,2,2,3,3-heptafluoro-3-methoxy-propane (n-C ₃ F ₇ OCH ₃ or HFE-7200)
690391	1,1,1,3,3,3-hexafluoropropane (HFC-236fa)
679867	1,1,2,2,3-pentafluoropropane (HFC-245ca)
24270664	1,1,2,3,3-pentafluoropropane (HFC-245ea)
431312	1,1,1,2,3-pentafluoropropane (HFC-245eb)
460731	1,1,1,3,3-pentafluoropropane (HFC-245fa)
431630	1,1,1,2,3,3-hexafluoropropane (HFC-236ea)
406586	1,1,1,3,3-pentafluorobutane (HFC-365mfc)
422560	3,3-dichloro-1,1,1,2,2-pentafluoropropane (HCFC-225ca)
507551	1,3-dichloro-1,1,2,2,3-pentafluoropropane (HCFC-225cb)
354234	1,2-dichloro-1,1,2-trifluoroethane (HCFC-123a)
1615754	1-chloro-1-fluoroethane (HCFC-151a)
163702076	1,1,1,2,2,3,3,4,4-nonafluoro-4-methoxy-butane (C ₄ F ₉ OCH ₃ or HFE-7100)
163702087	2-(difluoromethoxymethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF ₃) ₂ CFCF ₂ OCH ₃)
163702054	1-ethoxy-1,1,2,2,3,3,4,4,4-nonafluorobutane (C ₄ F ₉ OC ₂ H ₅ or HFE-7200)
163702065	2-(ethoxydifluoromethyl)-1,1,1,2,3,3,3-heptafluoropropane ((CF ₃) ₂ CFCF ₂ OC ₂ H ₅)
297730939	3-ethoxy-1,1,1,2,3,4,4,5,5,6,6,6-dodecafluoro-2-(trifluoromethyl) hexane (HFE-7500)
71556	1,1,1-trichloroethane (methyl chloroform)
67641	acetone
25497294	1-chloro 1,1-difluoroethane (HCFC-142b)
75456	chlorodifluoromethane (HCFC-22)

593704	chlorofluoromethane (HCFC-31)
76153	chloropentafluoroethane (CFC-115)
63938103	2-chloro-1,1,1,2-tetrafluoroethane (HCFC-124)
75718	dichlorodifluoromethane (CFC-12)
1717006	1,1-dichloro 1-fluoroethane (HCFC-141b)
1320372	1,2-dichloro 1,1,2,2-tetrafluoroethane (CFC-114)
34077877	1,1,1-trifluoro 2,2-dichloroethane (HCFC-123)
75376	1,1-difluoroethane (HFC-152a)
75105	difluoromethane (HFC-32)
74840	ethane
353366	ethylfluoride (HFC-161)
74828	methane
79209	methyl acetate
75092	methylene chloride (dichloromethane)
98566	parachlorobenzotrifluoride (PCBTF)
354336	pentafluoroethane (HFC-125)
127184	perchloroethylene (tetrachloroethylene)
359353	1,1,2,2-tetrafluoroethane (HFC-134)
811972	1,1,1,2-tetrafluoroethane (HFC-134a)
75694	trichlorofluoromethane (CFC-11)
26523648	1,1,2-trichloro-1,2,2-trifluoroethane (CFC-113)
306832	1,1,1-trifluoro 2,2-dichloroethane (HCFC-123)
27987060	1,1,1-trifluoroethane (HFC-143a)
75467	trifluoromethane (HFC-23)
107313	methyl formate (HCOOCH ₃),
0	1,1,1,2,2,3,4,5,5,5-decafluoro-3-methoxy-4-trifluoromethylpentane (C ₂ F ₅ CF(OCH ₃)CF(CF ₃) ₂ or HFE-7300)
108327	propylene carbonate (C ₄ H ₆ O ₃)
616386	dimethyl carbonate (C ₃ H ₆ O ₃)
Perfluorocarbon compounds in the following classes:	
0	Cyclic, branched or linear, completely fluorinated alkanes
0	Cyclic, branched or linear, completely fluorinated ethers with no unsaturations
0	Cyclic, branched or linear, completely methylated siloxanes
0	Cyclic, branched or linear, completely fluorinated tertiary amines with no unsaturations
0	Sulfur-containing perfluorocarbons with no unsaturations and with sulfur bonds only to carbon and fluorine

VOC may be measured by a reference method, an equivalent method, an alternative method, or by procedures specified in either 10 CSR 10-6.030 or 40 CFR 60. These methods and procedures may measure nonreactive compounds, so an owner or operator must exclude these nonreactive compounds when determining compliance.

B. The following compound(s) are considered VOC for purposes of all record keeping, emissions reporting, photochemical dispersion modeling, and inventory requirements which apply to VOC and shall be uniquely identified in emission reports, but are not VOC for purposes of VOC emissions limitations or VOC content requirements.

CAS #	Compound
540885	t-butyl acetate

14. Volatile organic liquid—Any substance which is a liquid at storage conditions and which contains one (1) or more volatile organic compounds as defined in this rule.

15. Volatility—For purposes of 10 CSR 10-5.540 only, low volatility materials are defined as those which have a vapor pressure less than or equal to seventy-five (75) mmHg at twenty degrees Celsius (20 °C), moderate volatility materials have a vapor pressure greater than seventy-five (75) and less than or equal to one hundred fifty (150) mmHg at twenty degrees Celsius

(20 °C), and high volatility materials have a vapor pressure greater than one hundred fifty (150) mmHg at twenty degrees Celsius (20 °C). To evaluate VOC volatility for single unit operations that service numerous VOCs or for processes handling multiple VOCs, the weighted average volatility can be calculated from knowing the total amount of each VOC used in a year, and the individual component vapor pressure, per the equation in paragraph (1)(E)1. of 10 CSR 10-5.540.

(W) All terms beginning with "W."

1. Wall-fired boiler—A boiler that has pulverized coal burners arranged on the wall of the furnace. The burners have discrete, individual flames that extend perpendicularly into the furnace area.

2. Washcoat—A transparent special-purpose coating having a solids content by weight of twelve percent (12%) or less. They are applied over initial stains to protect and control color and to stiffen the wood fibers in order to aid sanding.

3. Washing—Purifying, cleaning, or removing impurities from coal by mechanical process, regardless of the cleaning medium used.

4. Washoff operations—Those operations in which organic solvent is used to remove coating from a substrate.

/1./5. Waste generator—The business entity that is directly responsible for the supervision of activities that result in the accumulation of friable asbestos-containing waste materials.

/2./6. Waxy, heavy pour crude oil—A crude oil with a pour point of fifty degrees Fahrenheit (50 °F) or higher as determined by the ASTM Standard D (97-66), *Test for Pour Point of Petroleum Oils*.

7. Waterproof resorcinol glue—A two (2)-part resorcinol-resin-based adhesive designed for applications where the bond line must be resistant to conditions of continuous immersion in fresh or salt water.

8. Web—A printing process where a continuous roll of substrate is fed into the press.

/3./9. Wet cleaning—The process of using water or other liquid and a wet brush, mop, cloth, sponge, or similar wet cleaning device to completely remove any residue of asbestos-containing materials from surfaces on which they may be located. This definition does not include the use of a wet vacuum cleaner.

10. Wet scrubber—An add-on air pollution control device that utilizes an alkaline scrubbing liquor to collect particulate matter (including nonvaporous metals and condensed organics) and/or to absorb and neutralize acid gases.

11. Wood furniture—Any product made of wood, a wood product such as rattan or wicker, or an engineered wood product such as particleboard that is manufactured under any of the following standard industrial classification codes: 2434, 2511, 2512, 2517, 2519, 2521, 2531, 2541, 2599, or 5712.

12. Wood furniture component—Any part that is used in the manufacture of wood furniture. Examples include, but are not limited to, drawer sides, cabinet doors, seat cushions, and laminated tops.

13. Wood furniture manufacturing operations—The finishing, cleaning, and washoff operations associated with the production of wood furniture or wood furniture components.

/4./14. Work area—A specific room or physically-isolated portion of a room, other than the space enclosed within a glove bag, in which friable asbestos-containing material is required to be handled in accordance with 10 CSR 10-6.240. The area is designated as a work area from the time that the room, or portion of it, is secured and access restrictions are in place. The area remains designated as a work area until the time that it has been cleaned in accordance with any requirements applicable to these operations.

15. Working day—A day, or any part of a day, in which a facility is engaged in manufacturing.

AUTHORITY: sections 643.050 and 643.055, RSMo 2000. Original rule filed Aug. 16, 1977, effective Feb. 11, 1978. For intervening history, please consult the **Code of State Regulations**. Amended: Filed Nov. 30, 2010.

PUBLIC COST: This proposed amendment will not cost state agencies or political subdivisions more than five hundred dollars (\$500) in the aggregate.

PRIVATE COST: This proposed amendment will not cost private entities more than five hundred dollars (\$500) in the aggregate.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: A public hearing on this proposed amendment will begin at 9:00 a.m., February 3, 2011. The public hearing will be held at the Doubletree Hotel and Conference Center, Ballrooms C, D, and E, 16625 Swingley Ridge Road, Chesterfield, Missouri. Opportunity to be heard at the hearing shall be afforded any interested person. Interested persons, whether or not heard, may submit a written or email statement of their views until 5:00 p.m., February 10, 2011. Written comments shall be sent to Chief, Air Quality Planning Section, Missouri Department of Natural Resources' Air Pollution Control Program, PO Box 176, Jefferson City, MO 65102-0176. Email comments shall be sent to apcprulespn@dnr.mo.gov.

Title 10—DEPARTMENT OF NATURAL RESOURCES
Division 10—Air Conservation Commission
Chapter 6—Air Quality Standards, Definitions, Sampling
and Reference Methods and Air Pollution Control
Regulations for the Entire State of Missouri

PROPOSED AMENDMENT

10 CSR 10-6.060 Construction Permits Required. The commission proposes to amend subsections (6)(D) and (8)(A). If the commission adopts this rule action, it will be the department's intention to submit this rule amendment to the U.S. Environmental Protection Agency to replace the current rule that is in the Missouri State Implementation Plan. The evidence supporting the need for this proposed rulemaking is available for viewing at the Missouri Department of Natural Resources' Air Pollution Control Program at the address listed in the Notice of Public Hearing at the end of this rule. More information concerning this rulemaking can be found at the Missouri Department of Natural Resources' Environmental Regulatory Agenda website, www.dnr.mo.gov/regs/index.html.

PURPOSE: This rule defines sources which are required to obtain permits to construct. It establishes requirements to be met prior to construction or modification of any of these sources. This rule also establishes permit fees and public notice requirements for certain sources and incorporates a means for unifying the processing of construction and operating permit issuance. This amendment incorporates permitting requirements that will cover new construction projects that emit greenhouse gas (GHG) emissions of at least one hundred thousand (100,000) tons per year or modifications at existing facilities that increase GHG emissions by at least seventy-five thousand (75,000) tons per year and clarifies rule text. The evidence supporting the need for this proposed rulemaking, per section 536.016, RSMo, is a June 3, 2010, **Federal Register Notice**.

(6) General Permit Requirements for Construction or Emissions Increase Greater Than *De Minimis* Levels.

(D) Special Considerations for Stack Heights and Dispersion Techniques.

1. The degree of emission limitation required for control of any air pollutant under this rule shall not be affected in any manner by—

A. [So much] **That amount** of the stack height of any installation [as] **which** exceeds good engineering practice (GEP) stack height; or

B. Any other dispersion technique.

2. Paragraph (6)(D)1. of this rule shall not apply to stack heights on which construction commenced on or before December 31, 1970, or to dispersion techniques implemented on or before December 31, 1970.

3. Before the permitting authority issues a permit under this rule based on stack heights that exceed GEP, the permitting authority must notify the public of the availability of the demonstration study and must provide opportunity for a public hearing on it.

4. This paragraph does not require that actual stack height or the use of any dispersion technique be restricted in any manner.

(8) Attainment and Unclassified Area Permits.

(A) All of the subsections of 40 CFR 52.21, other than (a) Plan disapproval, (q) Public participation, (s) Environmental impact statements, and (u) Delegation of authority, promulgated as of July 1, [2007, including the revisions published at 72 FR 24078 (effective July 2, 2007) and 72 FR 72617 (effective January 22, 2008),] **2009, including the revision published at 75 FR 31606-07 (effective August 2, 2010)**, are hereby incorporated by reference in this rule, as published by the Office of the Federal Register, U.S. National Archives and Records, 700 Pennsylvania Avenue NW, Washington, DC 20408. This rule does not incorporate any subsequent amendments or additions.

AUTHORITY: section 643.050, RSMo 2000. Original rule filed Dec. 10, 1979, effective April 11, 1980. For intervening history, please consult the **Code of State Regulations**. Amended: Filed Nov. 30, 2010.

PUBLIC COST: This proposed amendment will cost state agencies or political subdivisions \$5,050,000 over the life of the rule. The cost for fiscal year 2013 is estimated to be six hundred thirty-one thousand two hundred fifty dollars (\$631,250). Note the attached fiscal note for assumptions that apply.

PRIVATE COST: This proposed amendment will cost private entities \$20,200,000 over the life of the rule. The cost for fiscal year 2013 is estimated to be \$2,525,000. Note the attached fiscal note for assumptions that apply.

NOTICE OF PUBLIC HEARING AND NOTICE TO SUBMIT COMMENTS: A public hearing on this proposed amendment will begin at 9:00 a.m., February 3, 2011. The public hearing will be held at the Doubletree Hotel and Conference Center, Ballrooms C, D, and E, 16625 Swingley Ridge Road, Chesterfield, Missouri. Opportunity to be heard at the hearing shall be afforded any interested person. Interested persons, whether or not heard, may submit a written or email statement of their views until 5:00 p.m., February 10, 2011. Written comments shall be sent to Chief, Air Quality Planning Section, Missouri Department of Natural Resources' Air Pollution Control Program, PO Box 176, Jefferson City, MO 65102-0176. Email comments shall be sent to apcprulespn@dnr.mo.gov.

**FISCAL NOTE
PUBLIC COST**

- I. Department Title:** Department of Natural Resources
Division Title: Air Conservation Commission
Chapter Title: Air Quality Standards, Definitions, Sampling and Reference Methods and Air Pollution Control Regulations for the Entire State of Missouri

Rule Number and Name:	10 CSR 10-6.060 Construction Permits Required
Type of Rulemaking:	Amendment

II. SUMMARY OF FISCAL IMPACT

Affected Agency or Political Subdivision	Estimated Cost of Compliance in the Aggregate
Publically owned greenhouse gas sources	
- Phase 1	\$0
- Phase 2	\$1,262,500
- Continuing Phase 2	\$3,787,500
Total – ten (10) years	\$5,050,000

III. WORKSHEET

Permitting Application

Phase 1 - Sources are already subject to Prevention of Significant Deterioration (PSD) due to their non-Greenhouse Gas (GHG) pollutants
Zero (0) PSD permits x \$84,500 application = \$0

Phase 2 - Sources subject to PSD due to their GHG pollutants
One (1) PSD permit x \$84,500 application = \$84,500

Continuing Phase 2 - Sources subject to PSD due to their GHG pollutants
One (1) PSD permit every 2 years x \$84,500 application = \$84,500 x three (one every other year for six years) = \$253,500

Summary of Permitting Application Worksheet Costs

	1/2011 – 6/2011	7/2011 – 6/2013	7/2013 – 6/2020
Phase 1	\$0	-	-
Phase 2	-	\$84,500	-

Continuing Phase 2	-	-	\$253,500
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GHG Emission Reduction Measures

Phase 1 - Sources are already subject to PSD due to their non-GHG pollutants

Zero (0) sources = \$0

Phase 2 - Sources subject to PSD due to their GHG pollutants

One (1) PSD source

Replace/upgrade burners	\$ 75,000
Tuning	\$ 3,000
Optimization	\$ 100,000
<u>Instrumentation and controls</u>	<u>\$1,000,000</u>
Total	\$1,178,000

Continuing Phase 2 - Sources subject to PSD due to their GHG pollutants

One (1) PSD source every 2 years x \$1,178,000 = \$1,178,000 x three (one every other year for six years) = \$3,534,000

Summary of GHG Emission Reduction Measures

	1/2011 – 6/2011	7/2011 – 6/2013	7/2013 – 6/2020
Phase 1	\$0	-	-
Phase 2	-	\$1,178,000	-
Continuing Phase 2	-	-	\$3,534,000

Summary of Combined Permitting Application and Emission Reduction Measures

	Phase 1	Phase 2	Continuing Phase 2
Permitting	\$0	\$84,500	\$253,500
Reduction Measures	\$0	\$1,178,000	\$3,534,000
Total	\$0	\$1,262,500	\$3,787,500
Total – All Phases	\$5,050,000		

Fiscal Year 2012	\$631,250
Fiscal Year 2013	\$631,250
Fiscal Year 2014	\$631,250
Fiscal Year 2015	\$631,250
Fiscal Year 2016	\$631,250
Fiscal Year 2017	\$631,250
Fiscal Year 2018	\$631,250
Fiscal Year 2019	\$631,250

IV. ASSUMPTIONS

1. During the first phase of the rule, PSD requirements will apply to sources' GHG emissions only if such sources are already subject to PSD due to their non-GHG pollutants. Based on information from previous years, it is estimated that two (2) PSD construction permits will be affected during Phase 1 of the program which runs from January 2, 2011 – June 30, 2011. For this fiscal note, we assume neither of these two (2) sources will be publically owned. Phase 1 occurs prior to the effective date of this rule so there is no cost.
2. During the second phase of the rule additional large sources of GHG emissions with the potential to emit at least 100,000 tons per year of CO₂ equivalent will become subject to PSD requirements. For Phase 2 of the program, which runs from July 1, 2011 – June 30, 2013, it is estimated that five (5) PSD construction permits will be affected. For this fiscal note, we assume that only one (1) of those sources will be publically owned. The Environmental Protection Agency (EPA) estimates that nationwide, sources that undergo PSD permitting actions will spend an average cost ranging from \$59,000 to \$84,500 to prepare the application and receive the permit. The range in cost is due to whether the source is considered an industrial source or a commercial/residential source. In generating the fiscal impact, since we have no way of knowing what type of source it will be, the more conservative (higher) cost was used.
3. EPA commits to undertake another rulemaking, to begin in 2011 and conclude no later than July 1, 2012, that will outline an additional step for phasing in GHG permitting (Phase 3) to review permitting for smaller GHG emission sources. EPA will not require permits for smaller sources in Phase 3 or through any other action until at least April 30, 2016. Since there are no details on Phase 3 that could be used in estimating the fiscal impact, for purposes of this fiscal note, we continue Phase 2 into the future as it currently stands using the assumptions from Phase 2. Since the one (1) source in Phase 2 is over a two (2) year period, we use half a source per year or one (1) source every two (2) years in continuing Phase 2.
4. For the convenience of calculating this fiscal note over a reasonable time frame, the life of the rule is assumed to be ten (10) years beginning with Phase 2 although the duration of the rule is indefinite. If the life of the rule extends beyond ten years, the annual costs for additional years will be consistent with the assumptions used to calculate annual costs as identified in this fiscal note.
5. The actual costs to sources to install Best Available Control Technology (BACT) controls, while uncertain at this point, would likely add additional costs. In most cases for GHGs, this BACT process should lead to implementing energy efficiency measures, which generally cost less than add on emission controls and can result in cost savings. For the purpose of this fiscal note, we assume a hypothetical industrial, commercial, and industrial (ICI) boiler source is required to reduce GHG emissions. A facility having an ICI boiler is the most common type of source as indicated by

EPA. The emission reduction measures and their costs come from EPA's white paper Available and Emerging Technologies for Reducing Greenhouse Gas Emissions from Industrial, Commercial, and Institutional Boilers, October 2010. The source has a 30 million BTU boiler and will implement the following GHG emission reduction measures: replace/upgrade burners at a cost of \$2,500 per million BTU, combustion system tuning at a cost of \$3,000, combustion and boiler performance optimization at a cost of \$100,000, and upgrade instrumentation and controls at a cost of \$1,000,000. The costs over the first ten (10) years uses the same assumptions as found in assumptions 1-4 listed above.

**FISCAL NOTE
PRIVATE COST**

- V. Department Title:** Department of Natural Resources
Division Title: Air Conservation Commission
Chapter Title: Air Quality Standards, Definitions, Sampling and Reference Methods and Air Pollution Control Regulations for the Entire State of Missouri

Rule Number and Title:	10 CSR 10-6.060 Construction Permits Required
Type of Rulemaking:	Amendment

II. SUMMARY OF FISCAL IMPACT

Estimate of the number of entities by class which would likely be affected by the adoption of the rule:	Classification by types of the business entities which would likely be affected:	Estimate in the aggregate as to the cost of compliance with the rule by the affected entities:
Phase 1 – two (2) entities	Sources are already subject to Prevention of Significant Deterioration (PSD) or title V due to their non-Greenhouse Gas (GHG) pollutants	\$0
Phase 2 – four (4) entities	Sources subject to PSD or title V due to their GHG pollutants	\$5,050,000
Continuing Phase 2 – two (2) entities per year	Sources subject to PSD or title V due to their GHG pollutants	\$15,150,000
Total – ten (10) years		\$20,200,000

III. WORKSHEET

Permitting Application

Phase 1 - Sources are already subject to PSD due to their non-GHG pollutants
Two (2) PSD permits x \$0 application = \$0

Phase 2 - Sources subject to PSD due to their GHG pollutants
Four (4) PSD permits x \$84,500 application = \$338,000

Continuing Phase 2 - Sources subject to PSD due to their GHG pollutants
Two (2) PSD permits per year x \$84,500 application = \$169,000 x six (6) years =
\$1,014,000

Summary of Permitting Application Worksheet Costs

	1/2011 – 6/2011	7/2011 – 6/2013	7/2013 – 6/2020
Phase 1	\$0	-	-
Phase 2	-	\$338,000	-
Continuing Phase 2	-	-	\$1,014,000

GHG Emission Reduction Measures

Phase 1 - Sources are already subject to PSD due to their non-GHG pollutants

Zero (0) sources = \$0

Phase 2 - Sources subject to PSD due to their GHG pollutants

Four (4) PSD sources

	<u>1 source</u>	<u>4 sources</u>
Replace/upgrade burners	\$ 75,000	\$ 300,000
Tuning	\$ 3,000	\$ 12,000
Optimization	\$ 100,000	\$ 400,000
Instrumentation and controls	\$1,000,000	\$4,000,000
Total	\$1,178,000	\$4,712,000

Continuing Phase 2 - Sources subject to PSD due to their GHG pollutants

Two (2) PSD sources per year x \$1,178,000 = \$2,356,000 x six years = \$14,136,000

Summary of GHG Emission Reduction Measures

	1/2011 – 6/2011	7/2011 – 6/2013	7/2013 – 6/2020
Phase 1	\$0	-	-
Phase 2	-	\$4,712,000	-
Continuing Phase 2	-	-	\$14,136,000

Summary of Combined Permitting Application and Emission Reduction Measures

	Phase 1	Phase 2	Continuing Phase 2
Permitting	\$0	\$338,000	\$1,014,000
Reduction Measures	\$0	\$4,712,000	\$14,136,000
Total	\$0	\$5,050,000	\$15,150,000
Total – All Phases	\$20,200,000		

Fiscal Year 2012	\$2,525,000
Fiscal Year 2013	\$2,525,000
Fiscal Year 2014	\$2,525,000
Fiscal Year 2015	\$2,525,000
Fiscal Year 2016	\$2,525,000
Fiscal Year 2017	\$2,525,000
Fiscal Year 2018	\$2,525,000
Fiscal Year 2019	\$2,525,000

VI. ASSUMPTIONS

1. During the first phase of the rule, PSD requirements will apply to sources' GHG emissions only if such sources are already subject to PSD due to their non-GHG pollutants. Based on information from previous years, it is estimated that two (2) PSD construction permits will be affected during Phase 1 of the program which runs from January 2, 2011 – June 30, 2011. For this fiscal note, we assume that those two (2) sources will be privately owned. Phase 1 occurs prior to the effective date of this rule so there is no cost.
2. During the second phase of the rule additional large sources of GHG emissions with the potential to emit at least 100,000 tons per year of CO₂ equivalent will become subject to PSD and title V requirements. For Phase 2 of the program, which runs from July 1, 2011 – June 30, 2013, it is estimated that five (5) PSD construction permits will be affected. For this fiscal note, we assume that four (4) of those sources will be privately owned. The Environmental Protection Agency (EPA) estimates that nationwide, sources that undergo PSD permitting actions will spend an average cost ranging from \$59,000 to \$84,500 to prepare the application and receive the permit. The range in cost is due to whether the source is considered an industrial source or a commercial/residential source. In generating the fiscal impact, since we have no way of knowing what type of source it will be, the more conservative (higher) cost was used.
3. EPA commits to undertake another rulemaking, to begin in 2011 and conclude no later than July 1, 2012, that will outline an additional step for phasing in GHG permitting (Phase 3) to review permitting for smaller GHG emission sources. EPA will not require permits for smaller sources in Phase 3 or through any other action until at least April 30, 2016. Since there are no details on Phase 3 that could be used in estimating the fiscal impact, for purposes of this fiscal note, we continue Phase 2 into the future as it currently stands using the assumptions from Phase 2. Since the four (4) sources in Phase 2 is over a two (2) year period, we use two (2) sources per year in continuing Phase 2.
4. For the convenience of calculating this fiscal note over a reasonable time frame, the life of the rule is assumed to be ten (10) years beginning with Phase 2 although the duration of the rule is indefinite. If the life of the rule extends beyond ten years, the

annual costs for additional years will be consistent with the assumptions used to calculate annual costs as identified in this fiscal note.

5. The actual costs to sources to install Best Available Control Technology (BACT) controls, while uncertain at this point, would likely add additional costs. In most cases for GHGs, this BACT process should lead to implementing energy efficiency measures, which generally cost less than add on emission controls and can result in cost savings. For the purpose of this fiscal note, we assume a hypothetical industrial, commercial, and industrial (ICI) boiler source is required to reduce GHG emissions. A facility having an ICI boiler is the most common type of source as indicated by EPA. The emission reduction measures and their costs come from EPA's white paper Available and Emerging Technologies for Reducing Greenhouse Gas Emissions from Industrial, Commercial, and Institutional Boilers, October 2010. The source has a 30 million BTU boiler and will implement the following GHG emission reduction measures: replace/upgrade burners at a cost of \$2,500 per million BTU, combustion system tuning at a cost of \$3,000, combustion and boiler performance optimization at a cost of \$100,000, and upgrade instrumentation and controls at a cost of \$1,000,000. The costs over the first ten (10) years uses the same assumptions as found in assumptions 1-4 listed above.